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Missouri Medicine

JOURNAL OF THE MISSOURI STATE MEDICAL ASSOCIATION

JANUARY, 1959

VOLUME 56, NUMBER 1

Scientific Articles

SYMPOSIUM ON CHEST DISEASES

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Curiosa et Trivia

Each day, about three thousand Americans reach "retirement" age of 65 . . . and yet, yesterday they were employable!

* * *

Over forty million people under 40 years of age are still betting against the 80 per cent odds of protection against polio. Most of them have not had even one dose of Salk vaccine.

* * *

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* * *

Recent studies show that almost one-third of prescriptions never get filled. Reasons? Druggist doesn't have the particular drug (or the particular brand name)—the patient feels better—patient loses the prescription—or in some cases the patient considers his own therapy superior to his doctor's.

* * *

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* * *

Three-fourths of the entire human race live in potential malaria zones.

Capsule Clinics

- Local reaction to 1,200,000-unit doses of benzathins penicillin G can be significantly decreased by concomitant administration of 5 mg. prednisolone. McFarland et al., Antibiotic Med. & Clin. Therap. 5:455, 1958.

- Eighty-two patients with vitiligo were treated with psoralen drugs. Excellent results were obtained in 61 per cent of subjects. Response to treatment was somewhat delayed in patients who had experienced prior local trauma or skin disease. However, the presence or absence of a previous skin condition did not seem to influence ultimate response to psoralen therapy. Levia, M., Arch. Dermatol. 78:372, 1958.

- Extracardiac murmurs of two types may develop in late pregnancy: a systolic bruit originating in branches of the mammary artery, and a continuous murmur originating in the breast veins. Both may be misinterpreted as being due to heart disease. Hurst et al., New England J. M. 259:515, 1958.

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WASHINGTON

Congress will be swamped with requests to put more and more federal funds into medical education and research as well as medical care for the aged, according to comments in conferences being held by the Department of Health, Education and Welfare (HEW).

The meetings planned by Arthur S. Flemming, secretary of HEW, indicate there is widespread approval of existing government programs and a strong desire for more. More than 200 national organizations will have been given an opportunity to state their views on the rather lengthy agenda.

One purpose of the meetings was to help HEW arrive at its own stand on the issues, ranging from the Forand bill to increased aid to medical schools.

Whatever stand the HEW adopts on the various issues, one thing is clear: No tax cuts are expected this year.

This statement was made by Rep. Wilbur Mills (D., Ark.), chairman of the House Ways and Means Committee that handles health and welfare legislation such as the Forand bill to provide free hospital care for social security recipients.

Chairman Mills did hold out some hope for revision of the progressive rates in the income tax brackets to encourage investment, and a broader tax base. He commented:

"We are faced with the likelihood that people will continue demanding more and more services from the government. Therefore, as much as I would like to believe that this growth in our economy, and the resulting increase in our revenue level, will dissolve this fiscal shortage we face, I do not feel justified in relying on this alone. As a result, I have been forced to conclude that it is not enough to say that we can iron out the many problems in our tax structures as soon as tax reductions become possible, because, in all frankness, I am not at all certain when that day is coming."

He added it was a "hard, cold fact" that federal spending has been increasing in an "inexorable" way since the country was founded, according to the *A.M.A. Washington Newsletter*. It has climbed from 2 million dollars a year to an anticipated 80 billion dollars for this fiscal year.

The total cost for medical activities now is 2.8 billion a year, or nearly 345 million more than last year. And another new high is expected this session.

Programs in 22 separate agencies and departments of government range from cancer research to federal employee clinics. This year for all health programs (research, medical care, public health) Uncle Sam is spending about 62.6 per cent more than he did five years ago, 13.5 per cent more than last year.

Nearly 38 million people are eligible to receive all or part of their medical care from or through the federal government, the Washington office of the A.M.A. reports.

February 1 has been set as the deadline for the HEW to report to the House Ways and Means Committee on the various means for providing medical care for the retired aged, including use of social security.

Secretary Flemming said that so far the HEW has taken no position on the Forand bill. The *Washington Report Newsletter* views this "as something in the nature of a retreat" because the former HEW secretary, Marion Folsom, voiced opposition before Congress to the Forand measure.

Secretary Flemming terms the Forand bill as a "basic issue" facing the country today, and one that "unquestionably we will have to develop" a position looking to (HEW) testimony before the Ways and Means Committee.

The HEW conferences reportedly also have developed these other points: (1) need for HEW to confer with Internal Revenue Service to see that a more uniform stand is taken on arriving at tax-exempt status of many private groups working in the health and welfare fields, (2) the possibility of the United States providing a fifth category of public assistance known as general assistance, with provision of medical care as a starter and (3) need for lowering disability payments below age 50.

A 21-man Consultant Group on Medical Education has been formed by Surgeon General Leroy E. Burney for the purpose of getting answers to this question: How can the nation be supplied with adequate numbers of well-qualified physicians over the next decade?

In his letter of invitation to the consultants, Dr. Burney said that whether there is an absolute or relative shortage of the physicians the need for doctors will increase in the immediate future.

Two polls conducted recently by medical societies indicate a majority of those voting favor social security for physicians.

A mail poll taken in October in Ohio showed 45 per cent of the association's membership (8,960) favored inclusion. A similar poll in the District of Columbia also indicated a strong preference of those voting for the coverage.

Hearings are expected to start next month on the subject of group hospitalization premiums in the District of Columbia. It will be a resumption of Congressional hearings started in August.

Sen. Wayne Morse (D., Oregon) will conduct the meetings as a high ranking member of the Senate Labor and Public Welfare Committee. He would have jurisdiction over any investigation into Blue Cross, Blue Shield or other voluntary hospitalization plans.

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References: 1. Hart, D.; Bagnall, A. W.; Bunim, J. J., and Polley, F. H.: Ninth International Congress on Rheumatic Diseases, Toronto, Ont. (June 25) 1957. 2. Report of Joint Committee, Medical Research Council & Nuffield Foundation, Treatment of Rheumatoid Arthritis, British Medical Journal (April 13) 1957. 3. Friend, D. G.: New England J. Med. *257*:278 (Aug.) 1957.

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Across Missouri

How to find enough money to cope with the growing problems of local and state government is going to face Missouri's lawmakers this session of the General Assembly, Larry Hall, head of the Jefferson City bureau of the Associated Press, reports.

They already have been told that they will have to dig up an extra 10 or 15 million dollars, Hall said. About that much will be needed to meet the requests of state agencies and institutions, even after they have been pared down by the budget staff.

And that does not taken into account new programs to be sought in the fields of health, welfare, highways and local government to mention just a few, he added.

Two physicians are among the new members of the House of Representatives. It has been several years since a practicing physician has served as a lawmaker. They are Drs. J. J. Wimp, Kirksville, and Luke A. Knese, St. Louis. Dr. Knese also is a lawyer. Both are Democrats and members of MSMA.

The biennial health budget request contained a "very substantial increase" in order to raise the state's health standards, Dr. H. M. Hardwicke, acting state health director, said.

The requested increase was near the 1-million-dollar mark for the 2-year period. The division received about $1,400,000 for this fiscal year.

Dr. Hardwicke said Missouri ranks 47th among the states on appropriations for health standards. He added his agency is able to discharge only 35½ per cent of its obligations with the money available. He said he would like to add 107 new positions to bring up the efficiency of the department.

The health chief commented that now only 26 per cent of the public water supplies are supervised; 24 per cent of the public sewage works, 48 per cent of the hotels and 61 per cent of the motels are inspected annually; only 30 per cent of the food and drugs processed in Missouri is inspected and only 14 per cent of food sold at retail and wholesale is inspected.

He also said the state needed four more premature centers to save premature babies.

Among the new money requests that will face the legislators will be the vendor program to provide medical care for persons on the state's relief rolls.

Fully implemented this program could cost the state more than 7 million dollars a year.

However, it is expected that Proctor N. Carter, director of the state welfare division, will ask for a much more modest figure to start the program. Included in his total request will be funds to raise the maximum monthly checks for the aged, disabled, and blind, from $60 to $65 a month to meet the new federal limit.

He recently indicated he was considering asking for special appropriations to care for a "limited number of bedfast patients" in licensed nursing homes.

"Payments to such cases might possibly run as high as $100 per month, depending on action of the Legislature," he added. His requests, undoubtedly, will provide some type of hospital care for the aged and possibly some aid on drug bills.

"Provision for medical care for indigents could well mean economy in the long run," Carter said. He explains that with proper medical rehabilitation many persons now on the rolls could be made self-supporting.

High on the list of controversial items on the legislative agenda will be a measure (or measures) to establish fire safety regulations for the state.

Dubbed the "fire marshal" bill in past sessions, it always has had a rough path that led nowhere.

This year may be a different story. The recent tragic school fire in Chicago has brought forth many new sponsors of such a state regulation. Several St. Louis lawmakers already have said they plan to push for it. Gov. James T. Blair also has said that, once again, he will ask the Legislature to consider a state fire marshal bill as he did in 1957.

Opposition in the past has declared such a law would give the marshal too much power.

Under the 1957 measure, he would have been permitted to inspect all buildings in the state where persons congregate. The marshal would have made rules "pertaining to recognized standards of prevention and protection." Thus, thousands of churches, theaters, and shops, would be required to conform to at least minimum standards of public safety.

The St. Louis University has received a $250,000 federal grant to establish a clinic for the evaluation of mentally retarded children over a 5-year period.

The state health division said the project is in the nature of a pilot program to arouse interest in the welfare, care and treatment of mentally retarded children. The school will cooperate with the state division through which the funds are allocated.

Missouri's penal system, especially its system of parole and probation, has been criticized by James V. Bennett, director of the United States Bureau of Prisons.

He said Missouri is one of the few states that depends upon the jury to determine a sentence.

Of all the systems to decide how much sentence a warped personality needs, the jury method is the least likely to be successful, he said.

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ctions require higher doses. Dosage for
lts is 2 to 4 teaspoonfuls 3 or 4 times daily,
ending on the type and severity of the in-
ion.

Missouri Division of Health

H. M. Hardwicke, M.D., *Acting Director*

FUNERAL DIRECTORS' COMPLAINT

Funeral directors of the state have come to the Bureau of Vital Statistics with a complaint about which they are quite serious.

A substantial number of death certificates have been received indicating that burial or disposition of the body had preceded the doctor's certificate and burial permit by a considerable lapse of time.

This violation of the law was called to the attention of several funeral directors. Officers of the Funeral Directors' Association stated, in defense, that in many cases it was impossible to obtain the physician's signature before the hour set for the funeral. Investigation proved this to be true.

One funeral director went to a physician's office. The receptionist took his name and he was told to wait. Many patients were seen and then the doctor departed, suddenly, on an emergency call, but without signing.

Similar occurrences are frequent.

One funeral director has even employed a "waiter" to sit in line in doctors' offices.

In another instance, a funeral director telephoned the Division of Health and reported, "I have a funeral scheduled for 11:30 today. I took the certificate to the hospital. The doctor was operating, but promised to sign the certificate. This he forgot to do. The certificate was sent to his office, but he again failed to sign. Now he is operating in a town some distance away. Members of the family from a distance are here and waiting. How can I get a permit for this funeral?"

The Division of Health does not feel that all blame accrues to the physicians in this case. Investigation shows funeral directors have also been careless in many cases. They must take their share of the blame.

A little thought and a little time by physicians could easily correct any blame-worthy neglect on their part.

It has been suggested that the law be changed, requiring the physician to initiate and complete the certificate up to, and including, his signature. The Division of Health does not believe any such drastic action is necessary.

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References: 1. Spies, T. D., et al.: J.A.M.A. 159:[illegible]45, 1955. 2. Spies, T. D., et al.: Postgrad. Med. 17:1, 1955. 3. Gelli, G., and Della Santa, L.: Minerva Pediat 7:1456, 1955. 4. Guerra, F.: Fed. Proc. 12:326, 1953. 5. Busse, E. A.: Clin. Med. 2:1105, 1955. 6. Sticker, R. B.: Panel Discussion, Ohio State M. J. 52:1037, 1956.

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Woman's Auxiliary

Mrs. Henry C. (*Esther*) Bauman, *President*

What finer thoughts than these could start any organization at the beginning of a new year? —From Henry Van Dyke

"Are you willing to forget what you have done for other people, and to remember what other people have done for you; to ignore what the world owes you, and to think what you owe the world; . . . to see that your fellow men are just as real as you are, and to try to look behind their faces to their hearts, hungry for joy; . . . to close your book of complaints against the management of the universe, and look around for a place where you can sow a few seeds of happiness—are you willing to do these things . . .; Are you willing to stoop down and consider the needs and the desires of little children; to remember the weakness and loneliness of people who are growing old; to stop asking how much your friends love you, and ask yourself whether you love them enough; to trim your lamp so that it will give more light and less smoke, and to carry it in front so that your shadow will fall behind you . . .?"

It seems incredible that it should be time for me to say I wish for you happiness beyond your own asking in your personal lives this coming year and for all of us success beyond measure in our work together.

Speaking of measuring, it will soon be time for us to measure our year's work at the convention in Kansas City. The Jackson County Auxiliary is talking and planning convention and when girls who are noted for fabulous plans begin to get their heads together to exceed all other conventions you know you want to start making your plans to be there. The Auxiliary will have its meeting at the President Hotel which is just one block and a half from the men's headquarters. April 5 is the date, so please circle the first part of that week on every new 1959 calendar that has so recently come into your home. We want to have lots of fun seeing friends we get to see so seldom and we want also to find happiness in looking at what our past year has held for us. Each year should bring steps forward in attainment and should form a firm stepping stone for the year ahead. If new things are available which will lead into next year's work we will display them at the convention. For the most part, though, we will think of convention as being a time of reporting and celebrating the work we have been doing.

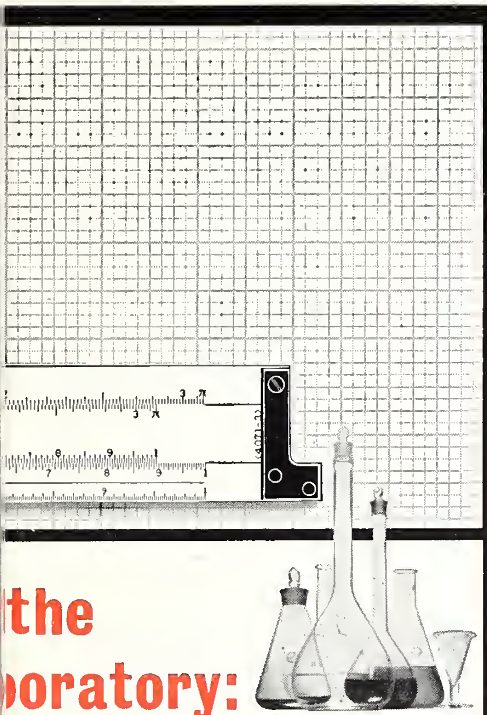
As I started my year as president I asked that we try to place the president's visits in the hands of the directors and that if a district meeting did not seem to meet the need of the area that the director arrange the visits so that the president need not backtrack to pick up each individual meeting. I found that this was no new idea, that each president had been laying the foundation for this type of thing. I would like to report my president's visits showing the success of this planning.

First of all we had one successful district meeting planned by Anita Washburn in Jefferson City for the Fifth District. This included Audrain, Boone, Cole, Cooper and Miller-Morgan-Moniteau. This meeting will be fully reported by Mrs. Washburn at the convention but we had an ideal set-up in my estimation. We had visual displays—and a panel discussion in which Venus Shattyn covered organization and membership ideas. Sue Shepherd discussed Safety. Marge Peterson reviewed A.M.E.F. and Community Service. Jane Stewart and Sara Stephan discussed all phases of Recruitment. Anita Washburn then moderated a question and answer period on all phases of the Auxiliary program. I spoke at the luncheon. We presented new ideas and how to use them—had plenty of program—food—and fun—but we ran out of time. I could write a great deal about this meeting and the value of it but I want to review the other contacts I have made up until now.

July 22 was my first official visit—my maiden voyage so to speak—when I spoke to a fine group of thirteen at the home of Mrs. R. C. Haynes at Marshall. Then in September I went to Cape Girardeau where a most enthusiastic group work actively and untiringly. The next day I met with the group at Sikeston to help them see the importance of maintaining their organization. At 1:20 the following morning I left the train at Chillicothe to meet with the Grand River Auxiliary and among other things—learn my part in the skit for the fall board meeting.

I made a convention report to the women of the Sixth District the night of September 17. On September 24 I attended a beautiful membership tea of the St. Louis County and the next day their president took me to Flat River where we lunched and visited with the Mineral Area Group. September 30 I visited the Clay County group at Liberty. On October 28 it was a wonderful pleasure to spend some more time with Marge Peterson, our president elect, and her nice family. I was entertained royally for lunch, parties, dinner and sightseeing besides seeing a fine group working actively in many areas. This Greene County group enter-

(Continued on page 22)



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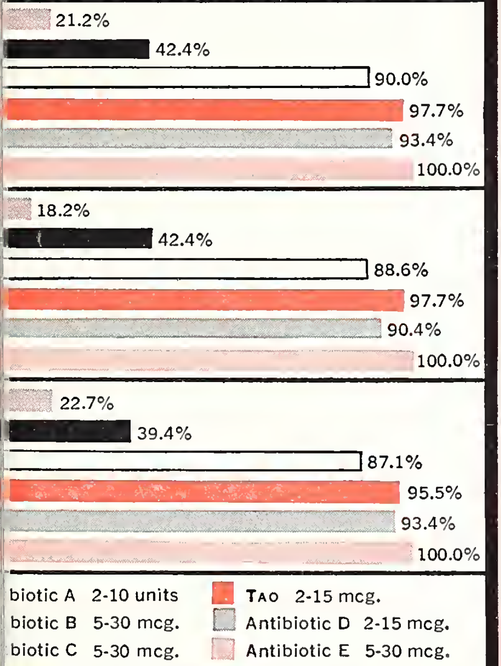

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References: 1. Koch, R., and Asay, L. D.: J. Pediat., in press. 2. Leming, B. H., Jr., et al.: Paper presented at the Symposium on Antibiotics, Washington, D. C., Oct. 15-17, 1958. 3. Mellman, et al.: Paper presented at the Symposium on Antibiotics, Washington, D. C., Oct. 15-17, 1958. 4. Olansky, S., and McCormick, G. E., Jr.: Paper presented at the Symposium on Antibiotics, Washington, D. C., Oct. 15-17, 1958. 5. Shubin, H., et al.: Antibiotics Annual 1957-1958, New York, N. Y., Medical Encyclopedia, Inc., 1958, p. 679. 6. Isenberg, H., and Karelitz, S.: Paper presented at the Symposium on Antibiotics, Washington, D. C., Oct. 15-17, 1958. 7. Wennersten, J. R.: Antibiotic Med. & Clin. Therapy 5:527 (Aug.) 1958. 8. Kaplan, M. A., and Goldin, M.: Paper presented at the Symposium on Antibiotics, Washington, D. C., Oct. 15-17, 1958. 9. Truant, J. P.: Paper presented at the Symposium on Antibiotics, Washington, D. C., Oct. 15-17, 1958.

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Missouri Academy of General Practice

John F. Pearl, M.D.

Due to the fact that our annual meeting was held recently, the Missouri Academy of General Practice has a new roster of officers, committee chairmen and committees. Dr. P. V. Siegel has completed a fine job in appointing a splendid list of chairmen and committees. As a service to the Missouri Academy as a whole and to every M.D. in the state, a complete list of this year's officers, chairmen and their committee are published.

President, P. V. Sigel, M.D., Smithton.

President-elect, P. C. Hall, M.D., St. Louis.

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It is recommended that this copy of Missouri Medicine be placed in a handy spot so that easy reference can be made to this page. I am sure that any of the officers, chairmen or members of committees will be glad to supply any needed information or help to the members of our constantly growing Academy.

Woman's Auxiliary

(Continued from page 18)

tained also all the ladies who would come from their district and we had fine representation from Jasper and Ozark counties. The next evening the Petersons drove me on to Cabool where we met with the friendly South Central group. The men of the group changed their meeting one week so that I could visit with this Auxiliary at this time and not make this long trip again. Is that not wonderful cooperation?

On November 7 I was with Evelyn Gillmor at the Jackson County progressive luncheon. It was called a Harvest Tidbit Festival and was arranged by the Independence girls. I have met with these ladies to talk convention before and it will be my pleasure to be with them from time to time.

My immediate plans call for another round of visits this coming week when I will be with Mrs. Hepner who is president of Boone County and then in the evening with the Johnson County girls at Warrensburg. The next day Ravena Martin will have a luncheon in her home. The following day we will talk with a group at Windsor in view of organizing them at some future date. Then on to Sedalia for their Christmas meeting.

In line with my request for district meetings or meetings of the smaller groups held at the time of the larger group nearby to save the president's traveling time I have tried to show how effectively this has worked. In each case I have made a circuit of trips which has cut miles of travel, and I feel deeply grateful to the groups that have had to change their plans to meet my time. In the future I hope this will be a continuing policy.

I have visited with the St. Joseph group on several occasions and have of course helped with our local activities.

I feel that the first of the year is a good time to report my activities up to now. From here on for the most part I will be arranging convention program and getting ready to sum up the year's work so that there will be coordination with next year's work.

The best of everything to you and yours this coming year. I heard that ulcers are caused by mountain climbing over molehills. I know the doctors will be delighted to hear this.

This communication signed: A Happy Volunteer.

Missouri Medicine

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Vol. 56 January, 1959 Number 1

Symposium on Chest Diseases

Hemoptysis in Older Men

KATHARINE R. BOUCOT, M.D., *Philadelphia*

The subject of hemoptysis in older men is intriguing because hemoptysis is an alarming symptom to both the patient and physician. Massive hemorrhage is more characteristic of suppurative disease or tuberculosis than of malignancy. Fatal hemorrhage is rare and is usually due to rupture of an aneurysm of Rasmussen in a tuberculous cavity or of an aortic aneurysm into a bronchus.

Hemoptysis has been the most important symptom in relation to lung cancer among 6,137 men over the age of 45 who joined the Philadelphia Pulmonary Neoplasm Research Project—a project designed to seek curable cancer by delineating the chronologic relationship between symptoms and x-ray changes in proven lung cancer cases. The men report back every six months for interview and x-ray. These men are not a random sample, but there is no reason to believe that those with hemoptysis differ from any other group of older men with hemoptysis. Hemoptysis has been reported by 395, or 6.5 per cent of the men in our study. Remember that this is a symptomatic group—one out of four of these men complains of cough for months or years. Our figure of 7 per cent is almost identical with that reported by Chaves in a study of 4,771 chest clinic patients in New York. It is of interest that 5 per cent of the men whose chest x-rays were interpreted as negative reported hemoptysis.

Hemoptysis increased with increasing age from 5 per cent in men between 45 and 54 years of age —that is the same figure, you remember, that I mentioned for men with negative x-ray; it is a sort of base line figure for this group—to 10 per cent in men over 75. There was a higher percentage with hemoptysis at all ages among nonwhites than among whites, with a peak of 13 per cent among Negroes between 55 and 64 years of age. The more abnormal the chest x-ray appearance, the higher the percentage of reported hemoptysis —from 5 per cent in the negatives to 28 per cent among those whose films suggested cancer.

Over a follow-up period varying from one to five years, we had a fairly low per cent with proved diagnoses; this has risen now to 19 per cent. That seems rather shocking, but it compares with other studies. Chaves, whose patients were chest clinic patients and presumably ill or with abnormal films, only had 28 per cent with proved diagnoses. We have been rigid in our criteria as to proof of diagnosis, and three quarters of our men have negative films so this difference between Chaves figures and ours is understandable. Back in 1942 Jackson and Diamond did an interesting study on just under 500 men who came to the Jackson Bronchoscopic Clinic at Temple University School of Medicine. They ruled out those with tuberculosis and they also ruled out those who had not been bronchoscoped, and yet they only came up with 25 per cent diagnosed for these men with hemoptysis who had been bronchoscoped.

Infection accounted for most of the hemoptysis, with neoplasms lagging in second place and cardiovascular disease just behind the tumors. Two of the men with proved cancer also had proved active tuberculosis. Seven per cent of the men with hemoptysis among the first 4,702 men who entered the project had active tuberculosis.

So far as cancer and hemoptysis are concerned,

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the figure for proved cancer was 6 per cent for 395 men reporting hemoptysis compared with only 1 per cent among 5,742 men without hemoptysis. The significance of hemoptysis in regard to cancer increased with increasing age. Between ages 45 and 54 there was little difference between those with or without hemoptysis, but above age 55, 8 per cent of the men with hemoptysis had cancer compared to only 1 per cent of those without hemoptysis. This may only reflect a more advanced stage of cancer in our older men and we are studying the situation further.

The following case illustrates the importance which should be given to symptoms despite a "negative" x-ray appearance. This is a 56 year old white male whose film in December of 1952 was interpreted as negative. In October of 1954 he joined the Neopolasm Research Project. Two different chest specialists read the film as negative. Now, in retrospect, the hilum is certainly abnormal. However, these readings were done without the earlier film having been available, so the error is understandable. The man was interviewed by a third physician because he had had cough for months or years and blood-streaked sputum. He was rushed into the hospital, bronchoscoped promptly, but there was fixation of the carina which is of poor prognostic omen. Nevertheless, he was explored and was found to be inoperable. He had squamous cell carcinoma and died in April of 1956. In retrospect, perhaps if this man had joined the Project sooner, his life might have been saved since the Project physicians heed symptoms as well as x-ray abnormalities. On the other hand, this tumor was centrally located. In our experience, unless these centrally located tumors give rise promptly to major disease, like pneumonia, they are missed early. Even when pneumonia occurs today, it is too often regarded as "viral pneumonia," responds to therapy, and the opportunity for bronchoscopy is missed.

So far as survival is concerned, the death rates have been markedly lower for the group of 170 men in whom no etiology was found for their hemoptysis, and most of these have had no change x-rays over the follow-up period of one to five years. It is our impression that many of them suffer from bronchitis associated with emphysema. Dr. Peter Theodos, a member of the pulmonary Neoplasm Research Project staff, is studying this matter further.

The importance of hemoptysis is demonstrated by the fact that the 18-month mortality rate for the men with hemoptysis was 14 per cent compared with 6 per cent for those who had not had hemoptysis.

Now what about smoking? Hemoptysis was reported in a lower percentage of non-smokers than of those who smoked. It was highest in cigarette smokers, and lowest in non-smokers. Cigar smokers had about the same experience as mixed smokers; pipe smokers had not significantly more than non-smokers, but were certainly much better off than cigarette or cigar smokers. Only one cancer has occurred in 890 non-smokers and it happened to occur in a man who did not report hemoptysis. Among the smokers, the prevalence of proven cancer has been five to six times higher among moderate and heavy cigarette smokers with than without hemoptysis.

It is our impression that hemoptysis occurs late in the course of lung cancer. Only two of the 22 proved cancer cases among the men with hemoptysis had hemoptysis as their only symptom. Twenty of the 22 cancer patients with hemoptysis have died, 19 within one year of hemoptysis.

In a case which demonstrates the natural history of a slow-growing squamous cell carcinoma, hemoptysis occurred (three years after the first abnormal x-ray) in the form of blood-streaking. This man was a food handler and was erroneously read negative year after year (in Philadelphia, by law food handlers have to be x-rayed annually) from 1947 through 1950. The x-ray of February 19, 1951, showed marked worsening, and it can be noted how the tumor is apparently migrating centripetally. Rigler pointed out some time ago that many lung cancers behave this way. This man lived seven and a half years after his first abnormal film; and he died of a massive pulmonary embolism. At autopsy, there were no distant metastases.

Finally, hemoptysis is a serious problem in older men. While it is likely to have been caused by infection, it is wise to consider lung cancer first, since in our experience 6 per cent of hemoptysis in men over 45 was due to proven carcinoma. Therefore, even in the presence of a negative x-ray, meticulous study including bronchoscopy and bronchography are indicated.

Woman's Medical College of Pennsylvania

Bronchoscopy in the Diagnosis of Diseases of the Chest

HERMAN J. MOERSCH, M.D., *Rochester, Minn.*

BRONCHOSCOPY holds an important place in the diagnosis of pulmonary disease. Since its value as an adjunct to the diagnostic armamentarium may be forgotten among the demands of a busy daily practice, I would like to touch on its contributions to diagnosis.

Let me emphasize first that bronchoscopy can and should be carried out with minimal discomfort and risk to the patient. I stress this point because some physicians are still under the impression that bronchoscopy is a traumatic procedure and one to be avoided, if possible.

INDICATIONS AND CONTRAINDICATIONS

Bronchoscopy should be considered in any patient with unexplained pulmonary symptoms or pulmonary findings. It also should be employed in any case in which added information may lead to better care of the patient.

The contraindications to bronchoscopy are few indeed. Bronchoscopy should be avoided when a patient is suffering from a massive pulmonary hemorrhage, for obviously it would be impossible to visualize the tracheobronchial tree. It is, however, often advantageous to perform bronchoscopy on such a patient at about the time the bleeding subsides, for it then may be possible to trace the bleeding to its source and localize a lesion which might otherwise escape detection. Bronchoscopy should be avoided in patients who are *in extremis* or who are suffering from an acute coronary infarction. It is to be avoided for patients with status asthmaticus because of the great risks involved. It should be performed only with great care on patients who have marked tracheal or laryngeal obstruction, and the bronchoscopist should keep in mind that the instrumentation may increase the laryngeal or tracheal obstruction and necessitate tracheotomy.

CARCINOMA OF THE LUNG

Among the many pulmonary disturbances in which bronchoscopy may be of value should be mentioned cancer of the lung. Bronchoscopy can be of tremendous value in the early diagnosis of cancer of the lung. The appearance of a carcinoma of the lung as seen through the bronchoscope varies greatly, but even if the lesion has the characteristic appearance of carcinoma, it is important to remove tissue for microscopic examination. Unfortunately, many carcinomas of the lung do not occur in the large stem bronchi, and therefore are not always endoscopically visual. In cases of this type it is important that material always be collected from the suspected segment of the lung for cytologic study. In my opinion, one of the greatest advances in diagnosis and treatment of cancer of the lung that has taken place in the last decade is the development of a satisfactory method for the cytologic study of bronchial secretions for carcinoma cells. The pathologist is able to make a positive diagnosis of carcinoma in a high percentage of cases by this means and, also, often to distinguish the type of carcinoma.

How accurate is cytology in the diagnosis of cancer of the lung? The chance of error is small indeed. In my experience it has been less than 3 per cent. By combining microscopic biopsy with bronchoscopy and cytology, one should be able to make a positive diagnosis of carcinoma of the lung in approximately 80 per cent of all cases.

ADENOMA AND BENIGN NEOPLASMS OF THE BRONCHUS

Bronchoscopy is the only method by means of which it is possible to make a positive diagnosis of adenoma of the bronchus before operation. The appearance of an adenoma through the bronchoscope is rather striking and, in most cases, characteristic (fig. 1). Eighty per cent of adenomas originate in the larger stem bronchi; consequently, the great majority of such tumors should be readily visible on bronchoscopic examination. Cytologic examination of bronchial secretions is of no value in the diagnosis of adenoma of the bronchus. This is due to the fact that an adenoma of the bronchus is covered by normal mucous membrane, so that exfoliation of the adenoma cells does not occur. Consequently, the preoperative diagnosis of adenoma is dependent on microscopic examination of tissue removed from the adenoma. Bronchoscopy on occasion may be utilized in treating adenoma of the bronchus. If the adenoma is attached to the bronchial wall by a narrow pedicle, and especially if it is located in the main stem bronchus so that pneumonectomy might be required to remove the tumor at open operation, bronchoscopic removal of the adenoma is the

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Section of Medicine, Mayo Clinic and Mayo Foundation, Rochester, Minnesota.

The Mayo Foundation, Rochester, Minnesota, is part of the Graduate School of the University of Minnesota.

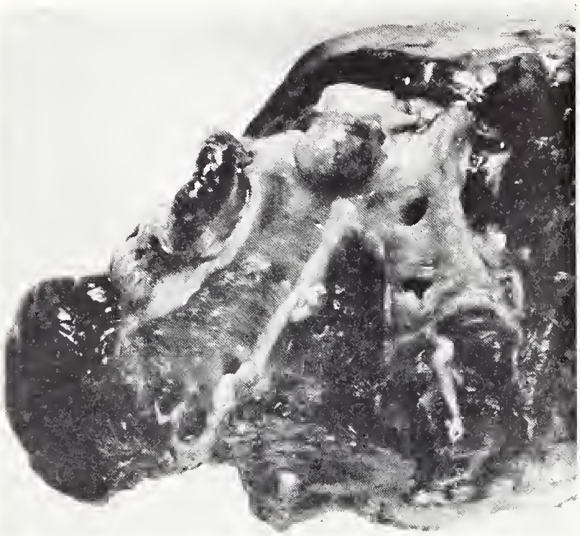

Fig. 1. Adenoma of the bronchus.

procedure of choice. It is useful also in the treatment of adenomas occurring in older patients for whom lobectomy or pneumonectomy may not be advisable or feasible.

Benign tumors of the bronchus are especially difficult to diagnose. Bronchoscopy is often the only method by means of which a preoperative diagnosis can be established. The case illustrated in figure 2 shows how closely a benign tumor of the bronchus can simulate a bronchogenic carcinoma roentgenographically. In this case, the offending tumor was found to be a pedunculated lipoma. It is advisable, whenever possible, to establish the diagnosis preoperatively, for it may influence the surgeon in selecting the correct operative procedure.

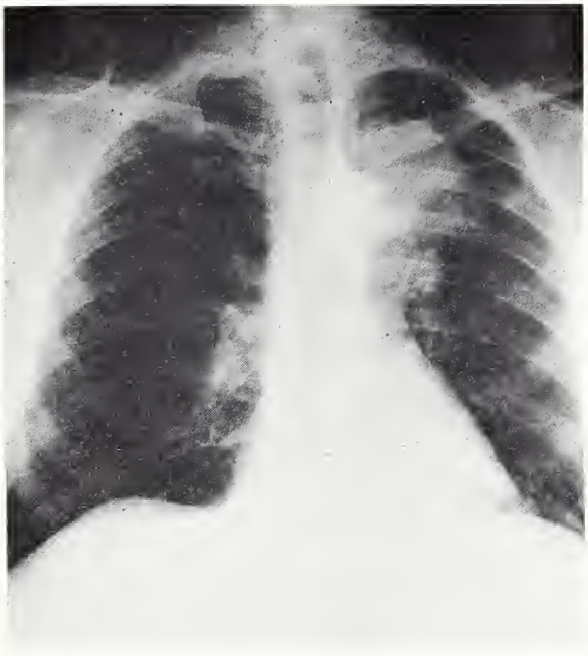

Fig. 2. A pedunculated lipoma of left upper lobe bronchus.

PULMONARY TUBERCULOSIS

With the great strides that have been taking place the last few years in the eradication of pulmonary tuberculosis, physicians sometimes forget that tuberculosis is still a potent cause of pulmonary difficulty. Tuberculosis is capable of producing a variety of changes in the bronchus, which can be identified only by bronchoscopic examination. Because of the bizarre manifestations of tuberculosis it is important that bronchial secretions and sputum always be obtained and cultured for tuberculosis in any unexplained pulmonary lesion. Bronchoscopy is today accepted in most centers as a routine examination in all cases of pulmonary tuberculosis in which resection is to be undertaken in order to determine the most suitable time for operation. The following case illustrates the peculiar clinical and roentgen changes that tuberculosis can produce, and how bronchoscopy can be of value in the differential diagnosis.

CASE REPORT

The patient, a child 3 years of age, had been well until a high fever suddenly developed. The parents thought the child had aspirated a foreign body and took her to their home physician. On bronchoscopic examination performed in the home locality the physician reported that he had found a piece of popcorn in the right lower lobe bronchus, which he had removed. Unfortunately, the child did not improve and continued to run a high fever. It was suspected that not all the foreign body had been removed. Because of the difficulty of the first bronchoscopic examination the child was referred to the Mayo Clinic for another. The roentgenogram of the chest at the time of our examination revealed a marked area of infiltration at the base of the right lung (fig. 3). On bronchoscopic examination I, too, thought I saw a foreign body in the right lower lobe. I removed material which certainly looked like popcorn but to be certain, the material was sent to the pathologist for study. The pathologist reported that the material was a caseating tuberculous node, and subsequent cultures made from the material showed tubercle bacilli.

This case illustrates the importance of microscopic examination and cultures of all unidentified material removed from the bronchus and the bizarre bronchial changes which tuberculosis can produce.

BRONCHOLITHS AND BRONCHIECTASIS

Broncholiths in the bronchus at times give rise to clinical symptoms that may lead to difficulty in differential diagnosis. Although most broncholiths are visible in roentgenograms of the chest, on occasion they may fail to cast a distinct shadow

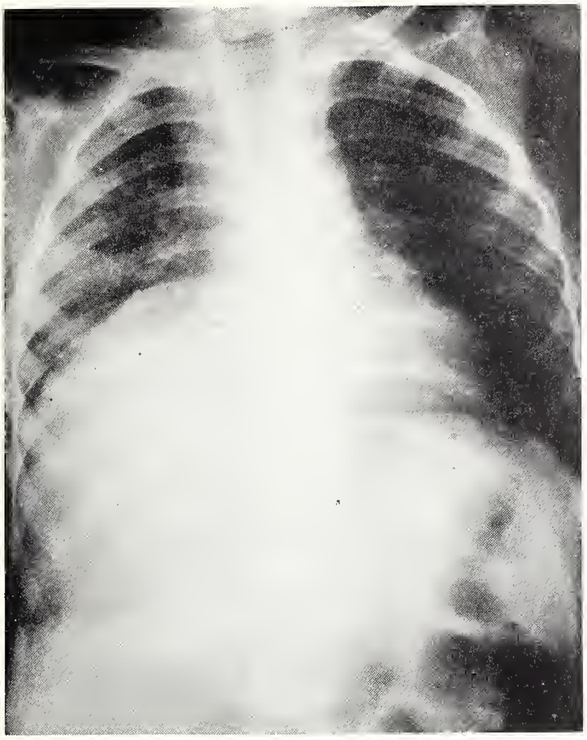

Fig. 3. Tuberculosis involving right lower lobe of the lung.

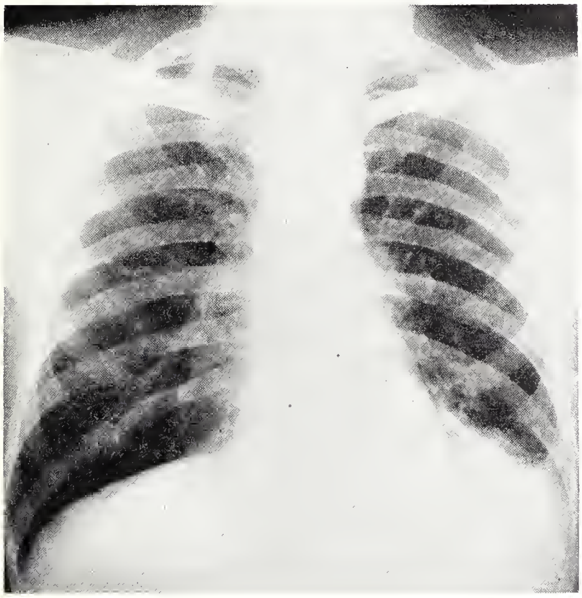

Fig. 4. Pulmonary changes due to a broncholith.

or may be overlooked. Bronchoscopy is the most satisfactory method for the identification of broncholiths and often affords a means for their removal (fig. 4).

All patients with bronchiectasis should have the advantage of at least one bronchoscopic examination. This should be done to rule out the possibility of an unsuspected foreign body, a stricture, or a benign tumor as a cause of the bronchiectasis. The following case illustrates the wisdom of such a rule.

CASE REPORT

The patient, a girl in her early twenties, had been perfectly well until a year before coming to the clinic. At that time she had become ill with fever and cough, and a diagnosis of pneumonia had been made. She seemed to make a satisfactory recovery, but the cough persisted. As the result of a bronchogram made at home, bronchiectasis at the base of the right lung was reported, and the patient was referred to the clinic for lobectomy. Our bronchograms, too, showed bronchiectasis at the base of the right lung (fig. 5). Bronchoscopy, however, revealed a peanut in the right lower lobe bronchus. Removal of the peanut, of course, relieved the patient of her symptoms.

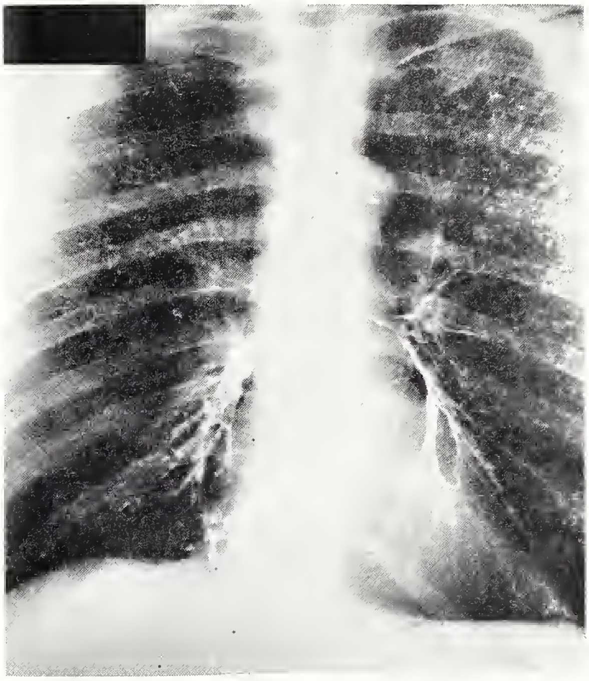

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Fig. 5. Bronchogram showing localized bronchiectasis in a patient with unidentified aspirated foreign body (peanut).

The patient had completely forgotten the aspiration of the peanut, and if a routine bronchoscopic examination had not been done, she would most likely have lost a portion of her right lung.

BRONCHOSTENOSIS, ATELECTASIS AND FOREIGN BODIES

One of the most interesting conditions in which bronchoscopy can be of value, not only in diagnosis but also in treatment, is bronchostenosis. Bronchostenosis may be due to compression of the bronchus from without, to inflammation in the wall of the bronchus, or to a benign or neoplastic lesion impinging on the lumen of the bronchus. Patients with bronchostenosis frequently have re-

Pleural Effusion

PAUL MURPHY, M.D., *St. Louis*

Pleural effusion is a common condition which is associated with a wide variety of diseases. Often the cause of fluid is quite obvious and its presence is of importance only because it may embarrass respiration in an already sick patient. The hydrothorax which occurs frequently in association with congestive heart failure is a good example of this. Foregoing any detailed consideration of this subject in general, I will concentrate attention on the problem which is posed by the patient whose pleural effusion is the only, or at least the outstanding, feature which is discovered by the usual clinical examination. By the usual clinical examination I mean a complete history, a thorough physical examination, and what is commonly called routine laboratory studies. In other words, one has examined the patient and does not know the cause of the pleural effusion. Let us define this situation as an unexplained pleural effusion.

How often does one expect to encounter this situation? Table 1 is a list of the common causes of pleural effusion and a cursory examination of it will show that in most instances of this condition, its explanation is quite obvious. For instance, an unexplained pleural effusion is certainly not apt to be due to a circulatory disorder. Congestive failure is, I am certain, far and away the most

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Bronchoscopy—Continued

current bouts of chills and fever. Cough, which is often present, may be minimal in amount, but it is generally more severe at the time the patient has chills and fever. Hemoptysis may or may not occur in these patients. The so-called middle lobe syndrome is a good example of bronchostenosis. Bronchostenosis can occur any place in the lung. Bronchostenosis of inflammatory origin involving the left upper lobe bronchus is illustrated in figure 6. This patient was subject to recurrent bouts of chills and fever. Surgical removal of the segment of the lung involved in the process showed the stricture to be inflammatory in origin. Its removal was followed by relief of the patient's symptoms.

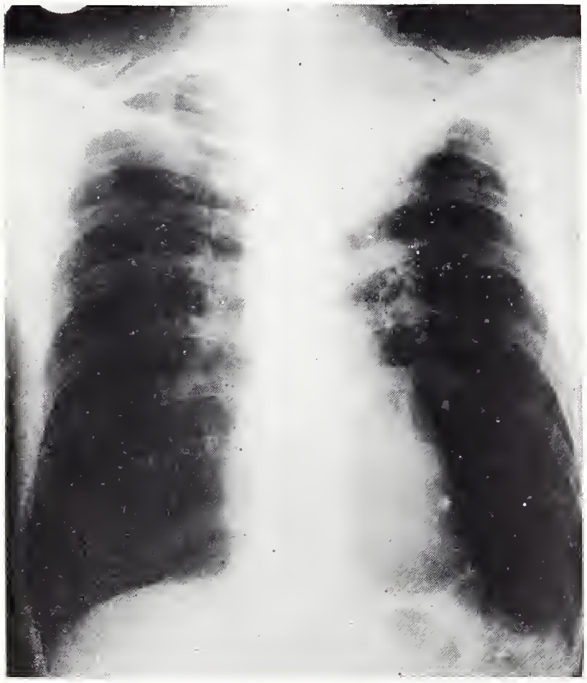

Fig. 6. Bronchostenosis (benign) involving left upper lobe bronchus.

Probably the most interesting group of patients with bronchostenosis are those in whom the condition is found in association with asthmatic bronchitis. These patients are likely to have recurrent bouts of chills and fever which last from three to five days, as a rule, during which time the cough is generally nonproductive. During such an episode the asthmatic condition tends to worsen. If on bronchoscopy a stenotic bronchus can be found and adequately dilated, the patient's asthma improves and the bouts of chills and fever disappear.

Bronchoscopy can be of tremendous value in the treatment of atelectasis, in both the postoperative and the nonoperative patient. The prompt and thorough aspiration of retained secretions obstructing the bronchus affords the patient prompt and gratifying relief from distressing dyspnea and an unrewarding cough.

Bronchoscopy is, of course, the procedure of choice in the removal of aspirated foreign bodies. It should be stressed that not all aspirated foreign bodies produce characteristic symptoms. When such a foreign body is nonopaque, and especially if it has been aspirated when the patient has been under emotional stress or, more likely, has not been in possession of all his faculties, it may offer especial difficulty in diagnosis. Bronchoscopy is the only way such a foreign body can be recognized.

There are, of course, many other conditions in which bronchoscopy can be of value in the diagnosis and treatment of pulmonary disease.

TABLE 1

COMMON CAUSES OF PLEURAL EFFUSION

- Circulatory Disorders
- Neoplasms
- Infections
  - Hypoproteinemic States
- Trauma
- Miscellaneous
  - Rheumatic Disease
  - Idiopathic Pleuritis
  - Lupus and other "Collagen" Diseases

frequent cause of serous fluid being in the pleural space; and this should be obvious to any seasoned clinician. Obstruction of venous return can cause pleural fluid but, again, it should be recognized at once. There is a remote possibility that a silent pulmonary infarct, silent in the sense that its only manifestation would be collection of pleural fluid, could cause this situation.

NEOPLASMS

When a pleural fluid is caused by a neoplasm, in all likelihood one is dealing with bronchogenic carcinoma. However, other primary cancers of the chest can cause this and it also can be due to metastatic lesions. It can be caused, of course, by primary tumors of the pleura; and before leaving the subject of neoplasms in relation to pleural fluid, do not forget that a primary tumor in a remote spot may cause this. I am referring to the Meig syndrome. The presence of fluid when it is secondary to cancer can certainly be unexplained by the usual clinical examination, and I will place malignancy on a list of special diseases to consider a little later.

INFECTION

Any infection of the lung, especially a bacterial one, can have an associated pleural effusion. It also occurs in viral pneumonias, but much less frequently. I believe it is estimated on the experience accumulated during World War II that only in about 1 per cent of viral pneumonias did one demonstrate pleural effusion. One must also remember that one can have what might be called a sympathetic pleural effusion. It can occur with infections in the neighborhood, such as subdiaphragmatic abscess or infections of the liver.

When thinking about the association between pulmonary infection and pleural effusion, tuberculosis is the outstanding subject for consideration, and we transfer this disease to a list of diseases which we are in the process of compiling.

Hypoproteinemic states, such as occur with cirrhosis, nephrosis and other disorders of the kidney, are not infrequently associated with pleural fluid; but again the situation should be clear to any clinician and we can pass right over this subject. Likewise, trauma is a frequent cause for fluid in the pleura—more often this is blood rather than a serous fluid. However, this could hardly be unexplained as the cause for pleural fluid unless the patient were unconscious when the trauma occurred and had no recollection of it. So we pass over that.

In the group of miscellaneous conditions—rheumatic fever is not an infrequent cause of pleural effusion, particularly in the young; but most of the time the rheumatic disease will be clearly manifest and should not cause confusion.

Idiopathic (using idiopathic in the strict meaning of the word) pleuritis is a frequent cause of what we are designating as unexplained pleural effusion. It is being recognized much more frequently in recent years. I will talk more about it a little later. Likewise, lupus is now being recognized as being a frequent cause for so-called unexplained pleural effusion. Other members of this group that are often called collagen disorders can also be responsible; but among this group lupus is much more common than are any of the others.

TABLE 2

PLEURAL EFFUSION WHOSE NATURE IS NOT REVEALED BY CLINICAL EXAMINATION

Common Causes:	Tuberculosis
	Idiopathic Pleuritis
	Lupus
	Malignancy

I have taken a number of these conditions and put them on a special list which is shown in Table 2. We end up with these rather common causes for unexplained pleural effusion. Tuberculosis stands high in this list. It is to be thought of particularly when one gets any history of exposure to tuberculosis, and if the patient is up in years, particularly if he is a male, one will think of tuberculosis and malignancy as the two most probable causes. Searching for clinical clues, if the patient is toxic, one will think it rather unlikely that malignancy is the cause of the unexplained effusion. If one gets a history of recurrence, particularly if this is in a young person, he will think strongly of the possibility of the idiopathic pleuritis or pleuro-pericarditis.

TABLE 3

PLEURAL EFFUSION WHOSE NATURE IS NOT REVEALED BY CLINICAL EXAMINATION

Examine the fluid at once
Place reliance on the Tuberculin Test
Search for L. E. Cells
Biopsy of the Pleura

What can one do to further narrow the possibilities and to pinpoint the diagnosis? Table 3 lists a few of the procedures which, I think, are important in an attempt to finally resolve this problem. Fortunately, most of these examinations can be started and carried on simultaneously. Examination of the pleural fluid is exceedingly important and it should be done at once. Parenthetically, often if one removes enough fluid so that a subsequent chest film will reveal the situation in the underlying lung, he will have an extremely strong suggestion as to what he is dealing with.

The Enhanced Current Significance of the Tuberculin Test

KATHARINE R. BOUCOT, M.D., *Philadelphia*

THE PREVIOUS SPEAKER led nicely into this paper by emphasizing how helpful the tuberculin test is in the diagnosis of the etiology of pleural effusion. As a matter of fact, the renewed interest in the tuberculin test is due to its enhanced significance in the face of the slowly decreasing level of tuberculous infection in the general population. In many areas today, a positive reaction in a school child pinpoints the focus of tuberculosis infection and failure to react to tuberculin is of great exclusion value, not only in pleural effusion, as has been pointed out, but where there is any pulmonary abnormality. Interest in the treatment of tuberculin converters has added impetus to periodic tuberculin-testing programs among children. Where mass surveys have skimmed active tuberculosis from a given population segment, rescreening by tuberculin testing is becoming a more pro-

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Pleural Effusion—Continued

In examining the pleural fluid, the physical properties usually are not of much help. There has been far too much stress laid upon the question of whether or not the fluid is bloody, perhaps percentage-wise bloody fluids favor the diagnosis of malignancy, but this is not at all constant and is not sufficiently accurate to be of any particular value clinically. The same goes for the specific gravity and such. Bacteriologic examination of the fluid is important and should it be that the etiologic agent is one of the pyogenic bacteria, one should have his answer quickly because culture will almost certainly be positive in a short period of time. It is not often that mycotic disease will be confusing; but if it is the cause of the pleural effusion, one should be able to demonstrate the offending organism.

When one is dealing with tuberculosis, the situation is somewhat different in that it is rare that the organism can be demonstrated microscopically and one depends on cultures or guinea pig inoculations for information about its presence; and it is well known that this is going to require a matter of eight or ten weeks.

The cytologic examination of pleural fluid is exceedingly important. One expects to be able to demonstrate neoplastic cells if the condition is due to cancer in approximately 50 per cent of the cases. This percentage of positives will drop rather sharply if one happens to be dealing with lymphomata or with leukemic conditions. It is wise always to send some fluid immediately to be quick-frozen and to be stored in the deep freeze, because one never knows when the developments will make it important to be able to go back and start over on a fluid, particularly with reference to viral studies. Also in examination of pleural fluid, it is exceedingly important that it be placed on culture media immediately, and that the portion being sent to the cytologist reach him for processing without standing around in the laboratory.

The tuberculin test is exceedingly important in efforts to resolve the problem which we have under consideration. A negative tuberculin test is helpful in the evaluation of this problem. This is so because it almost never happens that the individual with a tuberculous pleurisy with effusion will fail to react to intermediate strengths of tuberculin PPD administered interdermally with proper technic. So, if the tuberculin test is negative, one can virtually exclude tuberculosis from the list of possibilities. On the other hand, if it is positive, it by no means implies that the effusion is due to tuberculosis because the individual with fluid due to cancer can well have a positive tuberculin reaction. This also applies to the other conditions which I have listed. One should also immediately ask for an examination with regard to the L. E. cells. One should have this done I think at least three times. Again this is not an infallible test, but still it is exceedingly valuable.

This brings us to the question of biopsy. It raises the important question as to whether or not a biopsy is necessary in the patient who has positive tuberculin test and a clinical course which is compatible with tuberculous pleurisy with effusion. I do not think it is necessary. One treats the patient for tuberculosis and if at the end of eight or ten weeks, the cultures and guinea pig are negative and something has come up in the clinical course which casts doubt as to whether this is tuberculosis, then do a biopsy. However, in the patient with the negative tuberculin test, if one has not been able to make the diagnosis, do the biopsy immediately.

508 N. Grand Ave.

ductive epidemiologic tool in resurveying. This is especially true in the light of current efforts to hold life-time radiation exposure at a minimal level.

In considering the tuberculin test itself, the currently available patch test is not suitable because it yields both false positives and false negatives. Last night Dr. Gray was kind enough to meet me at the airport; I had been traveling all day and was tired, but I became alert when he mentioned his interest in the patch test. I do agree with his attitude that, if Mantoux-testing, the intradermal test, is not feasible, I would surely prefer the patch test to nothing. I want to make that plain; however, I strongly prefer the Mantoux test if it is feasible. The method of choice is 0.1 cc. of PPD intradermally. In areas of low tuberculous infection, as I imagine your area is here, the intermediate strength tuberculin, 5 tuberculin units, is suitable for use as the first test whereas, on the eastern seaboard from which I come, we get too strong reactions if we use that dosage on a large scale.

When clinical disease is suspected, it is usually wisest to use the first test dose, 1 tuberculin unit; and I do not believe the full second strength should ever be used since it gives false positives on a nonspecific basis. Here in the home of Furcolow, I suppose I do not have to belabor that point. It is important that proper technic be used, that barrels in the syringe are not loose allowing the material to leak down on the side, that the syringes be kept for tuberculin only and not be used for histoplasmin or other testing. Readings should be recorded in millimeters of induration. The minimal positive reading is usually stated to be 5 mm., but there are a good many people who feel that this should be increased to 8 or 10 mm. The probability that active tuberculosis is present or will develop in a given individual increases with increase in size of the area of induration. This is understandable since the tuberculin reaction is related to the magnitude of the antigenic stimulus, as well as to the individual's capacity to react. For practical purposes, failure to react to the intermediate test dose excludes tuberculosis except for the following situations: recent infection (it takes three to seven weeks to convert), presence of an intercurrent febrile illness like measles; therapy with steroids is an important point these days, and critical illness of any type in which the body just does not have what it takes to react to anything. This latter situation is similar to that in serious pneumonias when, if the person cannot react with a leukocytosis, the prognosis is poor.

In my experience I have had only two patients who failed to react to tuberculin in the presence of active tuberculosis. One was a young woman physician who developed an apical lesion during her internship. This fluctuated and finally we took it out and it was tuberculosis despite repeated negative tuberculin tests. The other was an Oriental gardener who developed progressive disease. He was cared for over in New Jersey and finally came to me and we repeated the tuberculin test. It was still negative, and we felt it was time to get a diagnosis. He was negative bronchoscopically; he had repeated negative sputa so we did a pulmonary biopsy and found active tuberculosis, after which he converted to a positive skin test and his sputum became positive. He did well on antimicrobial therapy.

One must realize, particularly in young people, if we limit our x-rays to those who react to tuberculin, we are going to miss some important cases. The following case is that of a 15 year old boy on whom an x-ray was made in June 1944 when he was applying for a summer job at the Philadelphia Navy Yard. They simply rejected him; there was no follow-up. It took me months to find the boy because he had moved, and I found he was a big husky fellow, a five letter man on his school teams. He was admitted to a hospital—a good teaching hospital (we have five of them in Philadelphia) and this is one of our best—and he was negative to tuberculin, bronchoscopy was negative; everything was negative. Despite the fact that his tuberculin was negative, the chest conference at this institution felt that this had to be tuberculosis in a young boy. However, the Army did not take him and every time he applied for a job, he would be rejected because of his abnormal chest x-ray. Each time he was rejected he would ask me to tell them he was all right. I would say "I will if you will let me take another x-ray on you." More than three years later the lesion was definitely larger with an umbilicated appearance. This is almost pathognomonic of malignancy. The lesion was resected. The lesion was a so-called alveolar cell or terminal bronchiolar carcinoma. This used to be thought to be related to jaksiekte, an epizootic disease in Icelandic sheep. It is now accepted as a carcinoma. This boy is well ten years postoperatively, and had this boy been tuberculin-tested instead of having been x-rayed because he failed to react to tuberculin this would have been missed.

A sound program for the practicing physician would include annual tuberculin testing of school children, tuberculin testing of patients with symptoms or abnormal chest x-rays, and of diabetic persons upon diagnosis. Diabetic persons have twice as much tuberculosis as do nondiabetic persons, and the type of tuberculosis they develop is particularly fulminating. An x-ray of an 18 year old diabetic boy was done in our Philadelphia Diabetic survey. I do not know how I read it as suspicious. We got him back for a large film and here I slipped from grace and called the lesion

Pulmonary Infarctions

HERMAN J. MOERSCH, M.D., *Rochester, Minn.*

PULMONARY INFARCTION is a pulmonary complication that frequently is overlooked or incorrectly interpreted. This difficulty in diagnosis is due in large measure to the fact that pulmonary infarction does not always give rise to a characteristic train of clinical symptoms, nor does it produce laboratory findings that are diagnostic. The early diagnosis of pulmonary infarction is of paramount importance, for it permits prompt institution of proper medical therapy which often may be lifesaving. The most important factor in the diagnosis is to think of the possibility of pulmonary infarction. It is much more likely to be thought of when it occurs in a patient who has recently undergone abdominal or pelvic operation, or who has congestive heart failure than in a patient who has not had these antecedent difficulties.

Confusion sometimes exists in the minds of physicians as to the difference between pulmonary embolism and pulmonary infarction. Actually, they are part of the same process. After a pulmonary embolus has obstructed an artery, the part of the lung supplied by that vessel undergoes infarction. From a clinical standpoint, approximately 50 per cent of the clinically recognized pulmonary emboli cause infarction. This incidence is due in large measure to the rich blood supply to the lung and the frequent anastomoses between the pulmonary and bronchial arteries. It is rather interesting that Virchow,[1-3] many years ago, noted that pulmonary infarction was invariably associated with dilatation of the bronchial artery and that Ellis, Grindlay and Edwards,[4] in 1952, found it almost impossible to produce pulmonary infarction in the experimental animal after the bronchial artery had been ligated. It is apparent, therefore, that the blood supply of the lung plays an important role in the development of pulmonary infarcts. Added confirmation is derived from the high incidence of pulmonary infarction among patients suffering from cardiac decompensation with pulmonary congestion.

Pulmonary infarcts may occur anywhere in the lung but are found frequently in the lower lobes; they tend to extend out toward the surface of the lung and to localize in the costophrenic angle and along the rim of the middle lobe. When infarction of the lung occurs, the lung distal to the embolus tends to collapse and rapidly becomes congested because blood cells from the surrounding lung rush in. On microscopic examination at this stage, the alveolar vessels will be found congested with blood, and erythrocytes will be found pouring out into the alveolar space by diapedesis. At this early stage the process is not uniform throughout the entire infarct, but is patchy in distribution. For this reason a roentgenogram of the chest taken at this stage will show nothing more than an indefinite, hazy type of shadow.

Section of Medicine, Mayo Clinic and Mayo Foundation, Rochester, Minnesota.
The Mayo Foundation, Rochester, Minnesota, is a part of the Graduate School of the University of Minnesota.

Tuberculin Test—Continued

"minimal tuberculosis of indeterminate activity." In retrospect I am sure there is a thin-walled cavity. The third film done ten months after the large film retake—from February to December 1946—showed a definite far-advanced tuberculosis with cavitation, a destroyed upper lobe and spread throughout the balance of the right lung as well as contralateral spread. We had a rough time to save this boy's life. We feel that diabetic persons should be tuberculin tested upon diagnosis, and periodically thereafter.

The best use of the tuberculin test is still among contacts of tuberculous patients. When a case of tuberculosis is diagnosed, it is inadequate to take x-rays alone on contacts, particularly if they are only taken once. An 18 year old girl was a contact to a 12 year old sister, who derived her tuberculosis from a grandmother living in the home who was found to have active tuberculosis after the 12 year old was diagnosed. The clinic sent this girl to a survey unit for one film which was read negative in May of 1957. The girl returned in October 1957, having been ill since July. She now has far-advanced tuberculosis. Imagine that, in October 1957, such things are still happening! Reactors among contacts need meticulous follow-up for at least a period of two years after contact with the open case has been broken and thereafter fairly close follow-up for another three years, after which we believe annual x-ray is sufficient.

In summary, the tuberculin test is of greatly enhanced value today as a diagnostic tool and in epidemiologic study to pinpoint community foci of tuberculous infection. It should soon be as shocking in a community to find tuberculosis in a far-developed stage as it is now to find an outbreak of typhoid fever or diphtheria.

Woman's Medical College of Pennsylvania

Later on, as the congestive process advances and infiltration of leukocytes occurs, consolidation of the lung becomes more uniform and will cast a discrete shadow in the roentgenogram. Unfortunately, pleuritis develops over the infarct early and causes the production of fluid in the pleural space, so that the underlying consolidation may be obscured on the roentgenogram by the overlying fluid.

Most infarcts undergo resolution about the end of the first two weeks. In others an area of central necrosis may develop which may go on to a definite pulmonary abscess. Such an abscess may undergo spontaneous resolution or, on occasion, may rupture through into the pleural space, leading to the development of empyema.

CLINICAL FEATURES

Shock may or may not be a clinical manifestation of pulmonary embolism with or without infarction. Occasionally patients who later have pulmonary emboli will have a premonition of impending difficulty. This is probably due to the fact that the patient has had a small pulmonary embolus which was not of sufficient size to cause clinical symptoms but was large enough to make the patient aware that something was not right.

The most common early symptom associated with pulmonary infarction is pleural pain which is aggravated by movement or deep breathing. Generally some elevation in temperature and increase in the pulse rate are associated. The leukocyte count and the sedimentation rate are usually somewhat elevated and cough is frequently associated. Only one out of three patients with infarction will expectorate blood. Consequently, expectoration of blood cannot be relied on as essential in the diagnosis of pulmonary infarction. Pulmonary infarction produces a train of clinical symptoms identical to that seen in pneumonia, except that the patient does not have the manifestations of toxicity that are seen with pneumonia itself. The additional symptoms that develop in pulmonary infarction are dependent primarily on the fluid that accumulates in the pleural space secondary to infarction and whether or not necrosis and infection of the infarct occur.

Pulmonary embolism has a tendency to recur in approximately a third of the cases. This tendency makes it necessary to recognize the condition early and institute preventive therapy, for 18 per cent of the recurrent emboli terminate fatally if not correctly treated.

Pulmonary embolism tends to appear from the sixth to fourteenth day after operation. The tendency to depend on the presence of thrombophlebitis to assist in the diagnosis of pulmonary embolism should be avoided, for thrombophlebitis frequently appears only after the pulmonary infarction has taken place. Barker and Priestley,[5] in studying the problem of thrombophlebitis in the postoperative patient, found that only 16 per cent of patients who do have postoperative thrombophlebitis will subsequently have pulmonary infarction.

Pulmonary embolism associated with shock will present a somewhat different clinical picture. The first symptom usually is severe substernal pain which generally is excruciating in nature, closely resembling the pain of myocardial infarction. A drop in blood pressure usually is associated, and the patient breaks out in a cold sweat, becomes cyanotic, and on examination is found to have a weak and thready pulse, with evidence of collapse.

The physical findings in pulmonary infarction are unreliable. Pleural rub is by far the most constant finding and is located most frequently at the base of the lung. The rub tends to disappear rapidly with accumulation of fluid in the pleural space, and dullness to percussion with suppression of breath sounds will appear over the site of involvement. On occasion, crepitant rales may be detected over an infarct situated close to the surface of the lung in its early development, but these are transitory in duration. When an infarct becomes infected, the findings then become those of a pulmonary abscess or empyema.

The roentgenologic findings in pulmonary infarction are often nonspecific, and frequently will show much less than the clinical symptoms would seem to indicate. One seldom sees the characteristic textbook picture of pulmonary infarction with the wedge-shaped area of consolidation in the lung. Much more frequently, in the early stages nothing will be evident but an elevation of one half of the diaphragm or a hazy, poorly outlined area of density, most frequently located over the lower lobes. The areas of density may be single or multiple. Again, nothing will be evident in the roentgenogram but a convex shadow at one or the other hilus. A negative roentgenogram of the chest does not exclude the presence of a pulmonary infarct. Fluid accumulates rapidly in the pleural space in pulmonary infarction and soon obscures whatever pulmonary changes were present.

Often undue reliance is placed on the electrocardiogram in the diagnosis of pulmonary embolism and such reliance is not justified because the electrocardiograms of only one out of 10 patients with pulmonary infarction will show anything of diagnostic importance. Even then, the electrocardiogram must be taken within the first 48 hours after the embolism, or the electrocardiographic changes caused by the embolism may have disappeared. Forty per cent of patients with proved massive pulmonary emboli will show electrocardiographic changes similar to those associated with myocardial ischemia, namely RST depression with or without inversion of the T waves in one or more leads. The electrocardiographic

The Problem of the Isolated Circumscribed Pulmonary Nodule

HERMAN J. MOERSCH, M.D., *Rochester, Minn.*

THE ISOLATED solitary pulmonary nodule is of considerable interest because of the difficulty it presents in differential diagnosis, the hazard of its being carcinomatous in origin, and the danger of dissemination if it should be due to tuberculosis or one of the fungous diseases. A state of complacency certainly is not justified when one is dealing with a lesion of this type in view of the potential dangers it presents to the life of the person afflicted.

DEFINITION

It is well to define what is meant by the term, "isolated solitary pulmonary nodule." It is not advisable to depend on size alone in definition nor on the presence or absence of clinical symptoms. For the present discussion, isolated pulmonary nodules have to meet the following six criteria: (1) that the lesion is entirely within the substance of the lung, (2) that the lesion is more or less round in outline, (3) that it has a definite border, (4) that it is essentially the primary lesion within the lung, (5) that there is no evidence of

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Infarctions—Continued

changes are dependent on the size of the embolus and the degree of right ventricular strain.

TREATMENT

The treatment of pulmonary embolism should be instituted early, for its prompt and correct application may be lifesaving. Treatment may be divided into two main categories: treatment of the condition as it occurs (1) without shock and (2) in association with shock. In cases in which the infarct occurs without shock, treatment is directed toward two ends: (1) the relief of pain, and (2) the prevention of recurrent pulmonary emboli. In most cases the pleural pain can be controlled by the use of codeine or levorphan tartrate (levo-dromoran). If this fails, one of the tranquilizers can be given intravenously at intervals of four hours. Anticoagulant therapy should be started as soon as possible, keeping in mind the major contraindications to its use. Heparin in doses of 50 mg. should be given immediately by vein and thereafter every four hours until the prothrombin time has been brought under control by the concomitant use of coumarin drugs. The prothrombin activity following prolonged prothrombin time should be reduced to about 10 to 30 per cent of normal. If bishydroxycoumarin (dicumarol) is used, 300 mg. should be administered the first day, 100 mg. the second day, and then usually 50 to 100 mg. daily as a maintenance dose. Daily determination of the prothrombin time is important while the drug is being administered, in order to gauge the correct dosage of the drug. In making these determinations, the blood should be withdrawn from the patient before the doses of heparin and dicumarol are administered. Some physicians prefer ethyl biscoumacetate (tromexan) in combination with dicumarol, or warfarin sodium (coumadin) alone, rather than dicumarol alone, for they are of the opinion that the prothrombin time can be brought under proper control more rapidly and more smoothly by these means.

The treatment for pulmonary embolism with shock is identical to the treatment for embolism without shock, except for the prompt intravenous use of papaverine and atropine and the inhalation of oxygen.

If infection of the infarct should occur, antibiotics of the proper type should be employed.

The single most important factor in dealing with pulmonary embolism with or without infarction is to think of the possibility of its occurrence. If the presence of a pulmonary embolism is suspected, treatment should be started immediately. There is no definite rule for the length of time that treatment should be continued. In most instances 10 to 14 days is recommended. Probably a better procedure is to continue the anticoagulant therapy until the patient has become ambulatory and the clinical symptoms have been absent from two to three days.

Mayo Clinic

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obstruction of the lung distal to the lesion, and (6) that the lesion does not possess a cavity.

Such nodules may appear at any time of life and more frequently than not occur without producing clinical symptoms. They are seen somewhat more frequently in men than in women, primarily because the incidence of carcinoma of the lung is higher in men than in women.

CAUSATIVE FACTORS

A great variety of diseases may give rise to isolated pulmonary nodules. In a study of 156 indeterminate solitary circumscribed pulmonary nodules removed at the Mayo Clinic, Hood, Good, Clagett and McDonald[1] found the conditions listed in table 1. The nodules were of two main types: (1) those of neoplastic origin, and (2) those of inflammatory origin. More than a third of all the isolated solitary nodules in their series were malignant neoplasms. Bronchogenic carcinoma was the most common, followed closely by metastatic carcinoma. Of the benign neoplasms, hamartoma was by far the most common form. Granulomas comprised the great majority of the inflammatory solitary nodules found in the lung. In most cases, the organism responsible for the development of the lesion could not be determined even by bacteriologic studies. Mycobacterium tuberculosis was the most common organism isolated; Coccidioides immitis, Brucella and other fungi were less commonly seen. Although the figures in the table apply to the group of patients at the Mayo Clinic, they might not necessarily apply to patients in other sections of the country. Undoubtedly the incidence of the lesions would vary if the studies were confined to a different age group or were restricted to include only patients in a tuberculosis sanatorium. They certainly would vary if the patients all came from the southwestern part of the United States where coccidioidomycosis is much more prevalent than elsewhere in the country.

TABLE 1

PATHOLOGIC CLASSIFICATION OF SOLITARY CIRCUMSCRIBED LESIONS OF THE LUNG*

Lesion	*Cases*	
	NUMBER	PER CENT
Malignant neoplasm		
Bronchogenic carcinoma	25	16.0
Bronchial adenoma	12	7.8
Fibrosarcoma	1	0.6
Metastatic malignant lesion	17	10.9
Subtotal	55	35.3
Benign neoplasm		
Hamartoma	25	16.0
Mesothelioma	3	1.9
Thymoma	1	0.6
Hemangioma	1	0.6
Inflammatory		
Granuloma	65	41.7
Chronic pneumonitis	1	0.6
Chronic abscess	1	0.6
Miscellaneous		
Bronchial cyst	4	2.7
Subtotal	101	64.7
Total	156	100.0

* From Hood, Good, Clagett and McDonald.[1]

DIFFERENTIAL DIAGNOSIS

The differential diagnosis of isolated solitary nodules is indeed difficult. The roentgenograms in figures 1 and 2a depict three different circumscribed isolated pulmonary nodules. One is a carcinoma, another is a tuberculoma and the third is an adenoma. The problem in differential diagnosis is readily apparent when the lesion is asymptomatic and all laboratory studies are uninformative.

What then may afford a clue as to the nature of the isolated circumscribed pulmonary nodule? The age and sex of the patient are of value. Bronchogenic carcinoma is uncommon among persons who are less than 35 years of age. Larger lesions are more likely to be neoplastic in origin, but size alone is an unreliable yardstick, for the smallest of the three lesions seen in figures 1 and 2a was due to carcinoma. A past history of malignant disease or the current finding of a primary malignant lesion elsewhere in the body is strong presumptive evidence that the pulmonary lesion might be of the same origin. Great care must al-

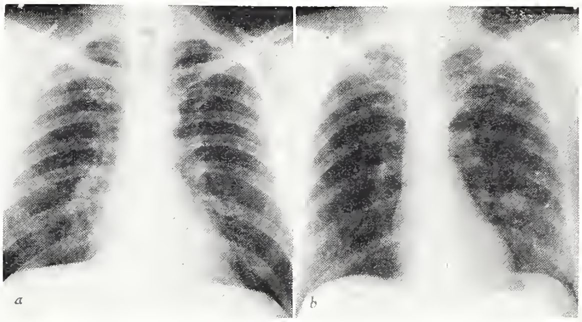

Fig. 1. Two isolated circumscribed pulmonary nodules. a. Carcinoma. b. Tuberculoma.

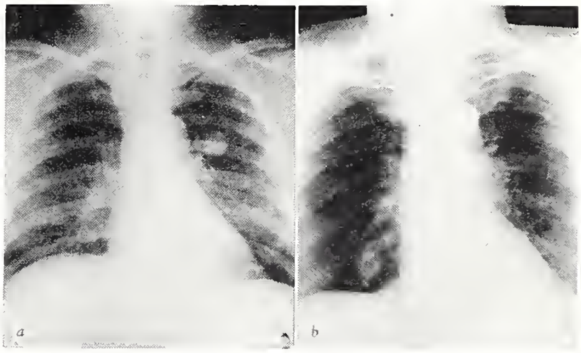

Fig. 2. Two adenomas of bronchus. a. Only lesion. b. In a patient with carcinoma of colon.

ways be exercised not to be misled by such an assumption, as illustrated in figure 2b. The patient was found to have a carcinoma of the colon. Roentgenograms of the chest showed a circumscribed isolated pulmonary nodule, and it was natural to assume that the lesion in the lung was probably of the same origin as the lesion in the colon. The patient was operated on, and the carcinoma of the colon was removed. Subsequently, the isolated circumscribed pulmonary nodule was removed and found to be an adenoma of the bronchus.

The same caution must be exercised in assuming that an isolated pulmonary nodule is of the same origin as existing pulmonary tuberculosis, coccidioidomycosis or one of the other fungous infections. The danger of making such an assumption is well illustrated in figure 3. This patient, when first seen, was found to have an active pulmonary tuberculosis which involved the apex of the right lung. The sputum on direct smear was positive for Mycobacterium tuberculosis. The patient was sent to a tuberculosis sanatorium where she remained for about a year, apparently responding well to therapy. At the time she was ready to be dismissed from the sanatorium, a roentgenogram of the chest revealed an isolated nodule at the apex of the right lung. The patient was referred back to the Mayo Clinic for further evaluation, and roentgenographic examination of the chest (fig. 3) showed an isolated circumscribed nodule in the right upper lobe. The sputum was negative for Mycobacterium tuberculosis. Bronchoscopic examination failed to reveal anything abnormal. During the course of her general examination the patient experienced a convulsive seizure. Neurologic examination suggested a brain tumor. On the basis of the preceding pulmonary tuberculosis, it was assumed that the nodule in the lung was a tuberculoma and that the brain tumor was a metastatic tuberculoma of the brain. Exploration of the brain tumor disclosed a tumor on the surface of the brain, which closely simulated a tuberculoma. Microscopic examination of the lesion, however, proved that it was a metastatic carcinoma originating in the lung.

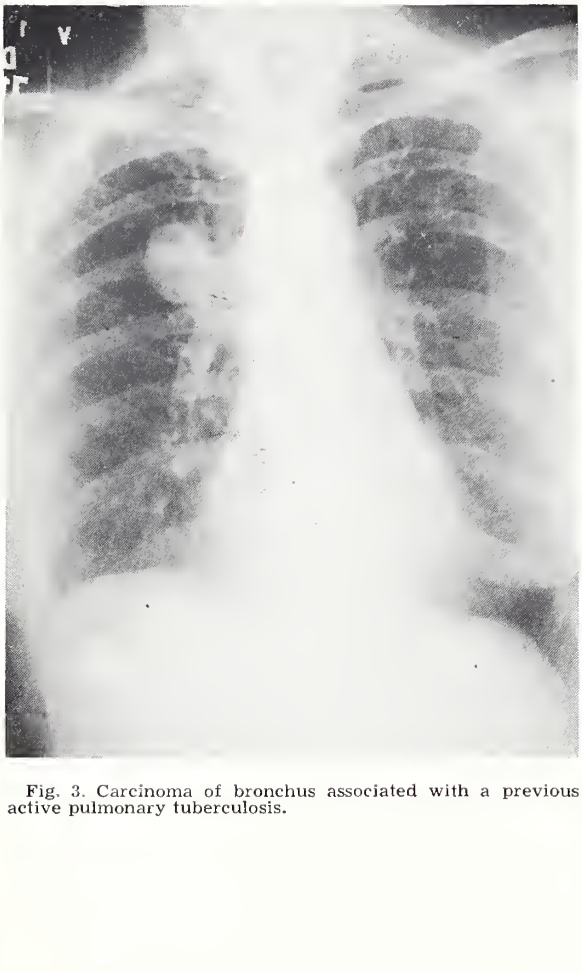

Fig. 3. Carcinoma of bronchus associated with a previous active pulmonary tuberculosis.

The rate of growth of the pulmonary nodule sometimes may give a clue as to its nature. Slow-growing lesions are less likely to be carcinomatous than rapid-growing lesions, although on occasion carcinoma of the lung may grow slowly over a long period of time. Elevation of the sedimentation rate may sometimes suggest the possibility that the lesion is carcinomatous in origin, but it is only suggestive, not definitive. A study of the group of circumscribed isolated pulmonary nodules showed that the sedimentation rate was elevated in 75 per cent of the cases in which the lesion was due to carcinoma. In contrast, it was elevated in only 50 per cent of the cases in which the lesion was due to adenoma of the bronchus, and in only 23 per cent of those in which the lesion was a granuloma. Thus, although an elevated sedimentation rate may be suggestive, it is not diagnostic, of carcinoma.

Skin tests are of little value in the diagnosis of solitary circumscribed pulmonary nodules. Although a positive skin reaction to tuberculin, coccidioidin or histoplasmin might be suggestive of the nature of the nodule, a negative reaction might be of greater value. Bacteriologic examination of sputum and gastric washings is of practically no value in determining the nature of pulmonary nodules preoperatively. Much more information will be obtained if all unidentified pulmonary nodules are examined bacteriologically after their removal from the lung.

There is a tendency to regard cytologic examination of sputum and bronchial washings as of no value in the diagnosis of the solitary pulmonary nodule. This is an incorrect assumption, for in approximately a third of the cases in which the nodule is due to carcinoma, malignant cells can be identified in the sputum or bronchial washings.

Roentgen examination of the thorax is the most important diagnostic aid in the study of the isolated pulmonary nodule. In the interpretation of the lesion seen on the roentgenogram it is first essential to be absolutely certain that the lesion is within the substance of the lung, and that one is not dealing with an artifact or a lesion outside the thoracic cage. If there is doubt on this point, a lateral view of the thorax may readily resolve the problem. This precaution is especially advisable when the nodule occurs in the lower lobes of the lung in women, for the nipple may cast a shadow suggestive of an intrapulmonary tumor.

In the past, great reliance has been placed on the presence of calcium in an isolated circumscribed nodule as excluding carcinoma. Experience has demonstrated that on rare occasions calcium may be identified roentgenologically in a carcinomatous lesion (fig. 4). Further study of the patient whose roentgenogram is shown in figure 4 proved that the area of calcification was due to an old Ghon complex which subsequently had become engulfed by the bronchogenic carcinoma. Good and Wilson[2] in the study of isolated pulmonary nodules have never found the lesion to be carcinomatous if the calcium was present in the nodule in a laminated form. Calcium, if present in isolated pulmonary nodules, can in most cases be identified on routine stereoscopic roentgenograms of the thorax. If doubt exists as to the presence of calcium, valuable information may be obtained at times by use of planograms.

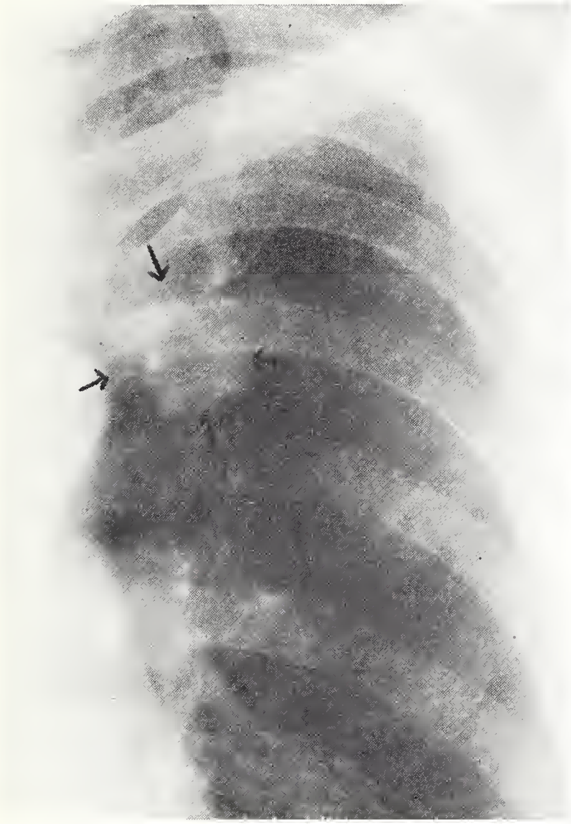

Fig. 4. Carcinoma of bronchus containing area of calcification.

A pleural mesothelioma (fig. 5) may be suspected, especially if the isolated nodule is located toward the surface of the lung, and the patient complains of articular symptoms. Although symptoms referable to the joints are noted on occasion in association with carcinoma of the lung, they do not occur with anything like the same frequency as with mesothelioma. Clagett, McDonald and Schmidt,[3] in a study of pleural mesothelioma, found that 16 of their 24 patients presented symp-

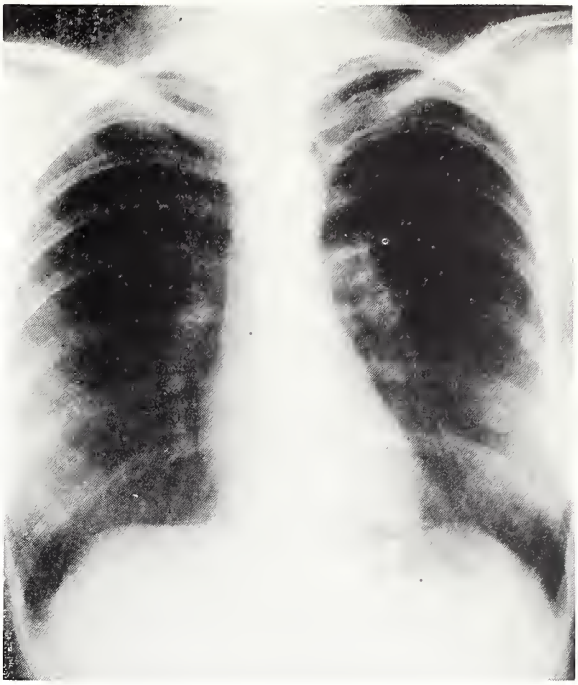

Fig. 5. Pleural meosthelioma.

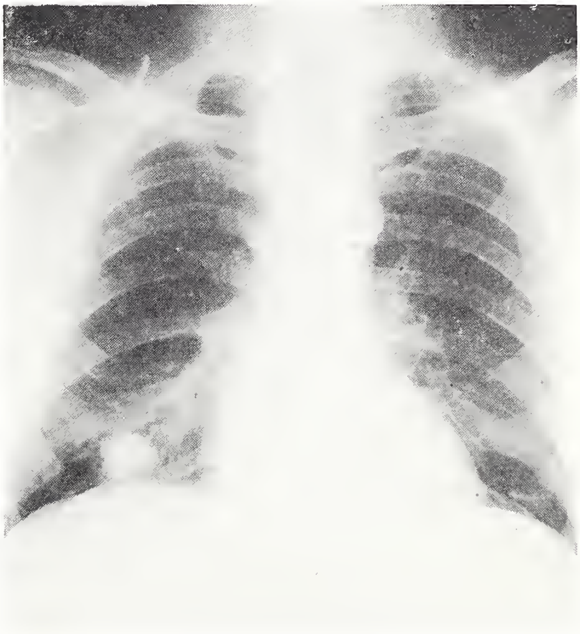

Fig. 6. Hamartoma.

Lung Cancer Detection With Emphasis on the Limitation of Roentgen Examination

KATHARINE R. BOUCOT, M.D., *Philadelphia*

ANY DETECTION program must be beamed toward those population segments in whom the highest yield may be anticipated. For lung cancer this means men over the age of 45. Of 142,156 Philadelphians x-rayed at two of our official survey units over a period of time when we had good statistical data, it was noted that the rate per 100,000 for females is 1 compared to 69 for men and 271 for men older than 45. These are conservative figures because they are based only on proven cases. Because of the high yields, we advocate semiannual chest x-rays for men over the age of 45.

Lung cancer detection today can be approached only by two methods: symptoms and x-ray changes. There is a group of individuals without symptoms whose single chest x-rays have no recognizable abnormalities. At this point we have nothing to offer such people. Some day we may have a skin test or a serologic test which will make it possible to follow this group more carefully. Among those individuals with no symptoms and with recognizable x-ray abnormalities, I believe we have our highest yield of curable cancer cases. Unfortunately, we sometimes do not over-read the way we should. A good screening process should have a fine filter or we miss some of these lesions. In 1947 a food handler's film was read as negative. In retrospect, when I asked the radiologist at the unit why he called the film negative, he said he felt it represented thickened interlobar pleura. The man was asymptomatic; he returned as legally required one year later. A change in the lesion was noted. He was still asymptomatic. However, he was cooperative and went right into the hospital, had a left pneumonectomy and he was one of our five-year survivals. He is still alive. The sad thing is that it appears recently that he may be developing some lesions in the right lung.

Another man had an erroneous negative film almost identical in site and appearance to the one just discussed. These were both white men in their early 50's; both had squamous cell carcinomas; both were asymptomatic throughout the period of the x-rays and both, at the same time, 1947 and 1948. The second man, however, had three cannon-balls at the left hilum when he came back in a year. His tumor obviously was different in its manner of spread. He refused hospitalization and nine months after the 1948 film, he was admitted to a hospital for severe headaches, de-

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Pulmonary Nodule—Continued

toms or physical findings, or both, referable to the joints. In many of the cases, the articular symptoms were primarily responsible for bringing the patient to a physician. Although pleural mesothelioma may be suspected from the clinical history, the diagnosis can be confirmed only by surgical removal and microscopic identification. All such lesions should be removed, for they may undergo malignant changes.

Hamartomas (fig. 6) are the most common of the benign tumors. Although such tumors may be suspected from their position and contour, and especially if they show calcification, there is no positive method of identification other than surgical extirpation. The same holds true for the nodules of inflammatory origin, of which the granuloma is the most common, if there is no evidence of calcification and an absence of evidence that the lesion has been present for some time.

It is obvious that the differential diagnosis of isolated pulmonary nodules is extremely difficult. Surgical removal, therefore, is advisable, if doubt exists as to the identity of a nodule. Whether or not such drastic measures should apply to isolated circumscribed nodules that are less than 1 cm. in diameter is probably open to question. Although carcinoma must start as a small lesion, experience has demonstrated that an isolated circumscribed lesion less than 1 cm. in diameter, that is removed surgically, is much less likely to be carcinomatous than one that is more than 1 cm. in diameter. Consequently, there would be more justification for close observation of a lesion less than a centimeter in diameter than of a larger lesion for a time to see whether it enlarges, before advising removal. Even in the hands of the most skillful thoracic surgeon, thoracotomy still carries with it some risk.

Mayo Clinic

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veloped hemiparesis and a psychosis and died. Autopsy revealed primary bronchogenic carcinoma with cerebral metastases. This matter of missed lesions in asymptomatic individuals is extremely important. The limitations of subjective interpretation must be kept in mind. Dual reading is helpful in avoiding this sort of thing.

There is a group of symptoms whose single PA films appear normal. There may be an increment of curable cancer in these that we are neglecting. A member of the Philadelphia Pulmonary Neoplasm Research Project bitterly complained of wheeze below the right mid-lung. He was interviewed and seemed in good condition, and the project physician who interviewed him did not refer him for follow-up study. He was so discouraged that he did not come back until 1954, at which time his wheeze had gone but he had a solitary nodule at the site of the wheeze which turned out to be a squamous cell carinoma. He had a pneumonectomy. Unfortunately he died the first postoperative night of a coronary. This is another one of our problems in trying to evaluate the work we are doing. These are older men and they cannot stand some of these rugged procedures. I, for one, am in favor of lobectomy rather than pneumonectomy whenever possible. Greening and Pendergrass found, in correlating postmortem findings with chest x-rays taken just before death, that, while solid nodules are the rarest type of missed lesions, some such nodules were missed in sizes ranging from 1 to 5 cm. The propinquity of chest wall or mediastinum and the obscuration by bone, heart or the dome of the diaphragm play major roles in the missing of small significant lesions.

I would like to make a plea for correlating all studies with three- or five-year survival because most of these cancer patients die within the first two years after diagnosis. When we look at the first abnormal films you will see that by the time the films suggest cancer, it is too late. Only 8 per cent are alive three years later of those suspected of cancer, 5 per cent alive and resected. When tuberculosis is suspected, it is bad too, the three-year survival rate being 4 per cent. When there is nothing much in the film, only a suspicious area, follow-up is poor and there are no survivors. The "erroneous negatives" have the best experience and the reason for that is that these are slow-growing tumors. That is why they came back after their original lesions were missed. Those whose lesions were missed and who became ill undoubtedly sought medical care or hospitalization. Once both symptoms and x-ray changes are present, we are far along in the course of the disease, and the prognosis is almost uniformly hopeless. A patient with atelectasis of the right middle lobe was hospitalized as an emergency, had a pneumonectomy, but lived only one year. Another man had a cavity similar to one discussed earlier, with that important sign of umbilication that is pathognomonic of malignancy. He was also resectable but died shortly after surgery.

An important sign often missed is obstructive emphysema. One man with this sign was followed because of lesions at the left apex. Ultimately the mass at the right hilum became more impressive and he developed atelectasis of the right upper lobe. He had both active tuberculosis and proved cancer. In our experience, 10 per cent of proved cancers also had active tuberculosis. It is a tragic thing when, because of one sputum positive for tuberculosis, studies for carcinoma are not pursued.

Another man who was diabetic regularly attending a diabetic clinic in a teaching hospital never had a chest x-ray until we x-rayed all the diabetic patients at his clinic. He died shortly after that film. By the time the films suggested cancer, it was just too late.

Another case demonstrates the tragedy of inadequate study in a general hospital on the basis of a positive sputum. This man had the pathognomonic picture of carcinoma of the lung. His story was that he was coughing up what he called "pieces of meat." We rushed him into a teaching hospital. Everybody thought he should be operated upon at once. He was bronchoscoped in preparation and bronchial secretions were positive for acid-fast bacilli. He was hurried out of the general hospital and sent to the chest clinic and treated for tuberculsois. This was in 1948. In 1950 he looked somewhat improved but it was noted that there was a tendency toward volume shrinkage of the right upper lobe. I could not get the chest people interested in this. Another year later, the man came in limping, with his face drawn to one side, obviously having had cerebral metastasis and hemiparesis. When I checked with the record room at the teaching hospital, that single positive smear had never been confirmed by culture, but the report of the culture went to the record room; no physician had even seen it. Many times through interesting one's self in a clerical situation like that can save a patient's life. Had the chest clinic physicians realized the single positive smear represented a non-tuberculous acid-fast organism, this man would have had his cancer resected.

We do not know the natural history of lung cancer. Rate of tumor growth seems to be the key to survival. Men with slow growing tumors survive incredibly long, like the one who lived seven and a half years after an abnormal film. They survive incredibly long without surgery, while those with rapidly growing tumors die promptly despite surgery. Those on whom we were able to obtain earlier films that were, on review, truly negative, did worse than those that had erroneous negative films; in other words, the former were rapidly growing tumors. It is worth

Treatment of the Terminal Case Of Lung Cancer

PAUL MURPHY, M.D., *St. Louis*

THIS IS A MELANCHOLY TOPIC. What I propose to do is to discuss what can and should be done for the individual considered inoperable at the time the diagnosis is made, or one in whom it is obvious that cancer has been left behind at the time of resection. Certainly at that time the patient may not be terminal, he still may be comfortable, and in fairly good health, but the general outlook for survival is about six months and he is inevitably headed toward the terminal state.

In the management of these patients there are three objectives. They are (1) to sustain morale, (2) alleviate pain and (3) prolong useful life. These goals are inseparable from the standpoint of accomplishment. Whatever advances one will support the other two, and contrariwise, lack of success in one field will mean failure in the other two. The most important of these objectives and the one most difficult to obtain is to sustain the morale of the patient. Here, one is dealing mainly with the art of medicine—science has little to do with it. All that I can hope to do is to point out that this is a highly individual problem and to express a few personal ideas which I think have been helpful in preventing the morale of these poor individuals from utterly dissolving. Up to this point in the management of the patient, it is quite likely that he has been in the hands of a team: the family physician, often a consultant has been called in from the standpoint of diagnosis, and then, of course, the surgeon has been on the scene. However, from here on I think it is exceedingly important that all responsibility for the future management of the patient rest in the hands of one physician. It does not mean that he is not to receive and accept advice from others, but he and he alone should deal with the patient and the patient's family, and he alone should issue the orders and make the decisions. One reason for this is that it is an old military axiom that a losing campaign always brings forth disagreement among the leaders, often of a bitter nature. The patient will inevitably sense this to the deterioration of his morale. Another reason is that there will be less opportunity for things not being done. Two people will not be standing around waiting for someone else to do something and each depending on the other for the executive act. Another thing is this: Two or three physicians can tell the patient and the family identically the same thing, but because they do not use identically the same words, it will be interpreted as several different opinions; and this, too, is of course hard on morale.

The physician that assumes this responsibility ideally should be the one who stands in best personal relationship to the patient, and also he has to be available—available always even at inconvenient times, and he should be able to make house calls. A hospital may be an appropriate place for these individuals to die, but it is important to keep them out of the hospital as much as possible short of that.

I think that it is necessary (this is my personal opinion) that these individuals be told the diagnosis in general terms. I feel it is wise to avoid all unnecessary details and, above all, do not offer unsolicited information. Now, from the standpoint of prognosis, this is a little trickier. One should be vague and evasive and concentrate on whatever hope and optimism you can present to the patient. A sustained sympathetic interest is what the patient appreciates most; it will buoy him up more than anything else; and

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Cancer Detection—Continued

stressing the virtues of case finding among asymptomatic men in whom the prognosis is best.

Asymptomatic individuals have the best chance for survival, a 39 per cent three-year rate. Interestingly enough, most of the survivors were men who had not been resected; but that is because, again, these are slow-growing tumors. The only ones who have a chance for cure are the resected ones, and 15 per cent in the asymptomatic group lived three years and had been resected.

Now we turn to what we call the "preclinical symptomatic"; that is, individuals who themselves were not aware of their symptoms, but whose symptoms could be elicited on questioning. The survival rate drops, the percentage resected drops; and when we get down to the clinically manifest, the only ones who lived three years had been resected.

There is a long period during which, if resection is carried out, cure may be effected. For that reason, it is wise to put aside the fatalistic outlook until every source of delay has been eliminated.

Women's Medical College of Pennsylvania

unless a physician is willing to waste time in a lost cause, he has no right to be dealing with this problem. A tactful and resourceful physician can usually leave these patients with something to hope for and at the same time prevent reckless optimism. It may be money well spent to allow the patient to travel long distances to the famous clinic or medical center only to be told what he already knows. Often that is good practice; more frequently it will only work financial disaster in the direction of the patient's widow and orphans, and therefore is to be avoided.

In attempts to control the pain and prolong the useful life of these patients there is nothing which is really effective. X-ray therapy and nitrogen mustard at the present time seem to be the most useful measures. The indications for these treatments differ, but since most patients will receive both of them, it is convenient to consider them together. In general, x-ray is a more efficient palliative method and it is used when the malignancy is sufficiently localized and accessible. Nitrogen mustard, on the other hand, since it is disseminated through the blood stream, is preferable when dealing with metastatic lesions or those not reached by the x-ray. Also, when dealing with superior vena caval obstruction, I think most physicians will elect to use nitrogen mustard in order to avoid the initial edema which so frequently follows the use of x-ray and which in this condition could be quite disastrous. Nitrogen mustard presents other advantages: It is less expensive in time and money than x-ray, and it can be given at home in a pinch. Of course, it is used when the patient is no longer able to receive x-ray therapy. It would be entirely impractical to discuss the technical aspects of x-ray therapy even though this were within my competence, which it is not. The experts do not agree and one notices that they change their own opinions with confusing regularity. I think it is fair to say there is no convincing evidence that supervoltage apparatus offers much more than can be obtained from making the best use of the conventional 250 kv apparatus which is available everywhere. The so-called cobalt bomb offers some interesting advantages apparently, particularly is it easier on the patient's skin. But pooled experience with this method is still too small and too recent to make one able to draw any final conclusions at the present time. Of course, from a practical standpoint physicians are going to depend upon local facilities for x-ray therapy; and I think one can be assured that if these are employed to the best advantage possible, patients will receive as much benefit as can be given to them anywhere.

The question as to whether or not to use nitrogen mustard or x-ray therapy on the patient who is comfortable and relatively asymptomatic is one which elicits heated controversy. My personal feeling is that it is better to wait until some symptom appears that constitutes a definite target before bringing either of these two better methods of palliation into use.

This practice has one valuable asset in that it conserves your therapeutic reserve. This is highly important from a standpoint of sustaining morale. On the other hand, quite frequently purely from the standpoint of morale, particularly in physicians themselves or people who have worked around medical affairs, it will be necessary to give them some treatment at once, even though they have no outstanding symptoms, to keep their morale from going into a complete tailspin.

The control of pain by drugs is highly unsatisfactory. Most of us flounder around in the same way—we begin with mild things, aspirin and codeine, and we work our way up the analgesic scale and are never satisfied with the results. I think most of us depend upon demerol more than any other drug. It is good, quite effective, but unfortunately the duration of its action is distressingly short. I have never quite understood the reluctance of many physicians to use morphine. Certainly nothing compares with it from the standpoint of ability to control pain. The side effects are highly undesirable, that is true; and there is always the danger of addiction; but speaking personally it seems to me that addiction in the remaining weeks of life is not too great a price to pay for added comfort. One should always fortify analgesics with sedatives or so-called tranquilizers, and I think that chlorpromazine is the drug of choice in this respect.

Prolonging a useful life depends on being able to sustain morale and avoid pain, and if one cannot do that, it is useless to drench the patient with vitamins and food concentrates and tonics; and it is utter folly to exhort them to acts of physical exercise. Good nutrition is important, but there comes a time when it is impossible to maintain and this point should be recognized and accepted. Blood transfusions may be useful at a proper time, but they have no place premortem nor does any other measure have justification if its only effect is to prolong the agony. There comes a time when to these poor wretches it seems that death is taking his holiday, and we hear them raise the ancient cry for release. This plea has never been better expressed in our English language than by its oldest master:

"Dear Mother Earth
  Pray let me in
Lo, now I vanish,
  Flesh, blood and skin."

—*Chaucer, Pardouer's Tale*

I urge you to honor this plea. One should have grave reasons before fanning the dying embers of life.

508 N. Grand Ave.

Panel on Chest Diseases

ROSCOE L. PULLEN, M.D., *Columbia*, Moderator

Dr. Pullen: I will attempt to combine some of the questions. Dr. Boucot, several have asked for some expression as to tuberculin testing, when it should be done, how often it should be done, the significance of it, the significance of a negative and a positive test, and the use of BCG.

Dr. Boucot: I think a good tuberculin-testing program should be centered on the preschool child. I think that such children, when well, should be tuberculin tested once a year. Child health conferences can be included in that. I do not know how enthusiastic this group is about child health conferences but in Philadelphia where we have a large lower socio-economic group, we have to lean heavily on child health conferences. We should also tuberculin test upon admission to school and again upon admission to high school. I think it is wise for the practicing physician to know the tuberculin status of all his patients; for instance, if an effusion arises, the physician knows that his patient has been failing to react to tuberculin and now reacts; he knows this is a fresh case of tuberculosis and can handle it expeditiously. And do I favor BCG vaccination? I am on the fence at the moment. We still vaccinate nurses and medical students at Women's Medical College, and I think we are approaching the time when perhaps we ought to rely more heavily on treatment of the converter rather than BCG vaccination; but women medical students have had a bad experience with tuberculosis and for that reason we are conservative in giving up a program that has cut our tuberculosis problem down to zero in the vaccinated medical students. I certainly do not advocate BCG vaccination on any wide scale. I think its only use today is limited to people in the medical and ancillary professions and in a few instances when a tuberculous case cannot be moved out of the home where the contacts have to remain.

Dr. Pullen: Dr. Murphy, should a patient with bronchogenic carcinoma be told of his chances of survival and diagnosis?

Dr. Murphy: Yes, if the patient insists on it. He should be told the diagnosis but I think one has to individualize on how much one is going to tell him about the prognosis. They are thinking in terms of survival time and I believe that it is better to be indefinite unless there is no other way to avoid his getting into business and financial problems. If he thinks he is going to live several years when actually the chances of living more than six months are slim, he may embark on enterprises which can be disastrous from that standpoint. If one sees that this is likely, I think one has to step in and put a check on it—gently always.

Dr. Pullen: Dr. Burford, have you noticed enough disability following a total pneumonectomy to warrant doing a lobectomy instead in certain cases?

Dr. Thomas Burford, St. Louis: Somebody must have heard me discuss this before. Yes, there are a number of people who are made chronic pulmonary cripples by the execution of a total pneumonectomy, and one valid reason for doing a lobectomy, even though one might prefer to do a total pneumonectomy, is the almost certain knowledge on the part of the experienced surgeon that a pneumonectomy will produce a state of chronic pulmonary invalidism. Our experience has been that clinical evaluation is far more accurate in determining which patient should have a pneumonectomy and which patient should have a lobectomy than various modern pulmonary functional studies. There is a long way to go before pulmonary function tests are clinically dependable.

Dr. Pullen: Dr. Moersch, this question is "Please say a few words about pulmonary emphysema, etiology, symptoms, frequency and treatment."

Dr. Moersch: That really is a big question. Pulmonary emphysema is becoming one of the most important problems in the field of thoracic disease and it certainly seems to be increasing in frequency. The diagnosis of pulmonary emphysema usually can be made from the clinical history and the physical examination. It is possible in the majority of cases to make a positive diagnosis without the use of laboratory tests. I think that the diagnosis of emphysema probably can be established in 90 per cent of patients by technics that can be employed in any physician's office. In a small group of cases, however, studies of pulmonary function are of tremendous value and are necessary in establishing the diagnosis.

As far as treatment is concerned, I know of no one measure that proves efficacious in all cases. One tries to remove the factors that might be causing the patient's symptoms to increase, such as dust and exposure to cold. I insist that a patient who has emphysema stop smoking because smoking does tend to aggravate his symptoms. Infection should be avoided in so far as possible. Use of one of the bronchial dilators affords many of the patients a great deal of relief. A little spray of isoproterenol (isuprel) hydrochloride may be used, especially when the patients first get up in the morning. They so frequently have trouble at that time because of the accumulation of secretions in the tracheobronchial tree during the night.

If they can get rid of this retained material, they seem to be able to get along rather well during the day. The spray should be administered during inspiration so that the bronchodilator gets down into the bronchial tree where it will do some good. Other medicaments, such as iodides, may be of help also.

How valuable is positive-pressure breathing in the treatment of emphysema? I used to be enthusiastic about positive-pressure breathing and felt that it had great value, but the more I have seen of it the less certain I am that positive pressure alone does the trick. It is likely that the bronchodilator does more good than the positive pressure itself. That does not mean that I would not use positive-pressure breathing in certain cases. There are persons who have been using it for long periods and who swear by it, and if they feel that it helps them, I certainly have no objection.

Dr. Pullen: Would you care to say anything about the belt?

Dr. Moersch: There are a couple of men from St. Louis here. I think I should turn the question over to Dr. Murphy because that is where the belt came from.

Dr. Murphy: I think that when one is dealing with emphysema he will use anything—he will grasp at straws. By that I do not mean that in patients that a belt, or probably better a tight elastic binder, may not cause some benefit, but I think it is only a small factor in the over-all program and if one does get any results, it is often difficult to ascribe success to any one of many measures that one is employing. I think that the belt in association with education in the proper method of breathing is worth using.

Dr. Moersch: I forgot to mention the necessity of instruction of patients in breathing exercises to keep respiratory muscles from deterioration.

Dr. Murphy: May I say one more thing? If one is using any appliance to increase intra-abdominal pressure, one has to employ one that is comfortable and not annoying to the patient or they will fail to use it for more than fifteen minutes.

Dr. Pullen: This next topic I have put last and I think the whole panel should participate in it. What is the relationship of smoking to etiology of carcinoma of the lung, particularly in older men with hemoptysis; and why is it that pipe smokers and cigar smokers seem to be more or less immune?

Dr. Boucot: In my experience I think we do not know enough about cigar smoking as yet. It is hard to get large groups of cigar smokers. I am inclined to feel that possibly the role of smoking has nothing to do with the carcinogens in the smoke. Most of the heavy cigarette smokers do not get carcinoma anyway. Our studies show the same thing that everybody else's work does, an increase with increased degree of smoking. So I have come to feel that maybe the story is this: If the smoking makes a man cough, it is bad, because we know that cough is bad; it may be involved in the etiology of emphysema, too, as some people have pointed out. And in those individuals who cough, smoke is irritating. Therefore, it possibly produces a chronic bronchitis which may predispose to the action of the true carcinogens, like chromates.

Dr. Burford: I have developed a sort of complex during the last several years trying to dodge this issue because, as most of you know, I have lived with and worked with one of the more preeminent people who contends that smoking cigarettes causes lung cancer. I never have believed that and I never shall. First of all, I am not satisfied with the statistics. Whether one takes the excellent figures of Doll and Hill and others, anyone with experience in the field of bronchogenic carcinoma has seen too many exceptions. I can raise the question of tracheal carcinoma versus bronchogenic carcinoma and not get any satisfactory answer from anyone who contends that smoking is the cause. Graham and I in our combined experience saw three carcinomas of the trachea—tracheas histologically, embryologically and teleologically the same structure as the stem bronchi. I have a personal feeling that the etiology of carcinoma will be finally discovered by some excellent chemical virologist. I think that most surgeons as they operate on cancer and track it down are convinced of its granulomatous nature. Some people now are doing some interesting steroid studies. It may develop that there is a real cancer diathesis. It is far more complicated than whether you smoke Camels or not in my opinion.

Dr. Boucot: I thoroughly agree with what Dr. Burford said. I think the problem is complicated; however, when the Pulmonary Neoplasm Research Project was set up, we were not interested in smoking. We agreed that most of the statistics were unreliable and our men were questioned by a clerk before the films were ever taken, so we know there is no bias. In those who have no hemoptysis, the figures for cigarette smokers run 0.8 per cent for occasional smokers, 1.3 per cent for moderate smokers, and 1.6 per cent for heavy smokers. When they had hemoptysis, the trend was the same: 2.5 per cent for occasional smokers, 6.1 per cent for moderate smokers and 6.6 per cent for heavy smokers. I am not ready to say which is cause and effect, or if there is any causal relationship.

Dr. Pullen: Dr. Murphy or Dr. Moersch, do you wish to add to this discussion?

Dr. Murphy: When one does not know the cause of a condition it is, of course, always difficult to say that any suspected factor could not play a role. But, in general, I agree with Dr. Burford and Dr. Boucot. I think it is deplorable that in all this there is so much discussion about the deleterious effects of smoking with regard to cancer and little on the subject which Dr. Moersch mentioned—emphysema and chronic bronchitis—where I think there is no argument whatsoever but that smoking is definitely harmful.

Dr. Moersch: I wonder if the person who does not smoke is not the peculiar person. Maybe the person who does not smoke has something missing in his body which may be a factor in the production of cancer. Like the other three members of the panel, I have not been convinced in my own mind that smoking alone is the cause of cancer of the lung. There is no question but that it does produce hyperplasia in the tracheobronchial tree. But is hyperplasia actually the precursor of cancer of the bronchus?

Dr. Pullen: I will ask a question of the entire panel, starting with Dr. Boucot. What precaution should be exercised in administering adrenal steroids to older people, those who may have a latent tuberculosis, for arthritis and allied inflammatory disorders?

Dr. Boucot: I think that is an excellent question. I think it is mandatory in administering steroids to make sure that a tuberculin test is done first; and in the presence of a positive reaction to tuberculin, steroid therapy should be covered by isoniazids and PAS. Some dreadful results in reactivating latent tuberculosis with outcomes much worse than the arthritis have been seen.

Dr. Moersch: I agree absolutely. Steroid therapy is something that should be used with caution, and the promiscuous use of it, I believe, is bound to lead to some difficulty.

Dr Murphy: I endorse these opinions emphatically.

Dr. Burford: I agree completely. As a matter of fact, I think an effort should be made to reduce indiscriminate steroid therapy.

Dr. Pullen: There has been a lot of discussion among radiologists in recent months as to the radiation hazards of repeated fluororoentgenograms. Those radiologists advocate that they are far more dangerous than not having one done at all. What is your feeling on that?

Dr. Boucot: I think there is no substitute for judgment in medicine. It is true that photofluorograms give a larger dose of radiation than the conventional 14 by 17; but all know that presently only 1/6 the exposure of the old photofluorographic units can be obtained. Many of the conventional x-ray units are not properly equipped with filters and diaphragms. The amount of exposure given by one chest x-ray is so small that I think we should be careful not to undo all the good—we are just at the goal of tuberculosis eradication. The amount of additional leukemia that is going to be produced by properly indicated chest x-rays is hardly worth talking about whereas, if one takes men over 45, the lung cancer problem is increasing at a great rate and it appears that the only ones that can be salvaged are those without symptoms who have these peripheral nodules that Dr. Moersch was showing. So I make a plea for judgment. I do not think we should use fluoroscopy for case finding, both for the sake of the patient and the physician who is doing the fluoroscoping, and it is not a good case-finding tool anyway. Chest x-rays are much better than fluoroscopy and always have been for finding tuberculosis early, I do believe that where indicated we should continue using chest x-rays, and that is in those population groups in which one can expect to find previously unsuspected clinically significant tuberculosis or lung cancer.

Dr. Pullen: Dr. Moersch, what is your feeling with regard to that and the 14 by 17 film?

Dr Moersch: Not being an authority on radiology, I am really out of my depth. However, I want again to emphasize a point that Dr. Boucot brought out, namely, let us not get hysterical about the dangers of roentgen-ray examination of the lungs. I happened to hear a discussion by members of the committee which reviewed this problem, and they are much disturbed over the publicity about this problem and fear that laws may be passed regulating the use of roentgen rays and how they should be employed. Roentgenologists would like to have more information concerning the hazards of roentgen exposure before formulating any definite recommendations. It is doubtful that the ordinary roentgenogram of the chest exposes a patient to any undue hazard. It is likely that ordinary dental roentgenograms of teeth will provide much more exposure than a routine roentgenogram of the chest.

Dr. Murphy: Certainly I do not know the answer either but I think it is well to restrict radiographic examination any time to what is necessary—if for no other reason than the economic one; and I deplore the growing tendency to routinely take a lateral film when many times it does not contribute anything at that particular time that one is not already aware of from the PA.

Dr. Burford: My position was admirably summed up by Dr. Boucot. I would say that I think fluoroscopy has been greatly overdone in this country and is probably being overdone at this moment. I think that if we cut down on needless fluoroscopic examinations which, particularly from the standpoint of the diagnosis of early pulmonary lesions, are not of much value anyway, that there is not any real danger if one takes indicated films on good machines. I disagree vehemently with Dr. Murphy; I think no patient has had a chest examination until he has had a lateral, whether it be a so-called normal film or a film when the chest is known to have disease in it.

Dr. Pullen: That summarizes the questions that have been asked. I want to express our appreciation to all the members of the panel.

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Special Article

A.M.A. Clinical Session

Minneapolis December 2-5, 1958

Report of the Missouri Delegates to the A.M.A.

JOSEPH C. PEDEN, M.D., *St. Louis;* DURWARD G. HALL, M.D.,
Springfield; ROLLA B. WRAY, M.D., *Nevada,* AND
J. LOREN WASHBURN, M.D., *Versailles*

Report of this meeting by Durward G. Hall, M.D.

The Missouri State Medical Association was represented by four delegates at the Minneapolis "clinical" session. Dr. Loren Washburn, Alternate Delegate from Versailles, sat in place of Dr. H. E. Petersen of St. Joseph; Dr. R. Wray of Nevada sat in place of Dr. Feierabend of Kansas City, and Dr. Joseph C. Peden of St. Louis and this reporter comprised the group. In addition, Dr. G. W. Robinson represented the section on Nervous and Mental Diseases and Dr. McCarroll of St. Louis represented the section on Orthopedic Surgery. Others from Missouri attended the scientific sessions and those of the House of Delegates. The attendance was almost perfect, as usual, for this House of Delegates.

The interest was keen, and in view of the top level reorganization of administrative and staff structures, as well as the usual "organizational maneuvering," the interest remained keen. The meeting was saddened by the death of recently elected (San Francisco, June of 1958) Dr. Warren Furey, Trustee. President Gunnar Gundersen and President-elect Louis M. Orr were in attendance, as well as many past presidents. The current resignations of the Editor of the *J.A.M.A.* and the Director of the Bureau of Economic Research, as well as the state of flux in the "Washington office" was explained by Chairman of the Board of Trustees Larson and the Executive Vice-President, Dr. Bing Blasingame, in Reference Committees and House of Delegates meetings as part of the new streamlining of procedures setting up better communications and administrative control as a follow-up of the Heller Report, as changed by the Hyland (of Michigan) and the Alesen (of California) reports.

The underlying restlessness and fear, in addition to these, seemed to be predicated upon fear departing on assumed premises for socio-economic togetherness, rather than being "againers" in the sacrifice of honest grass roots, down-to-earth correctness. The final action of the Reference Committees and the House of Delegates allayed such fears.

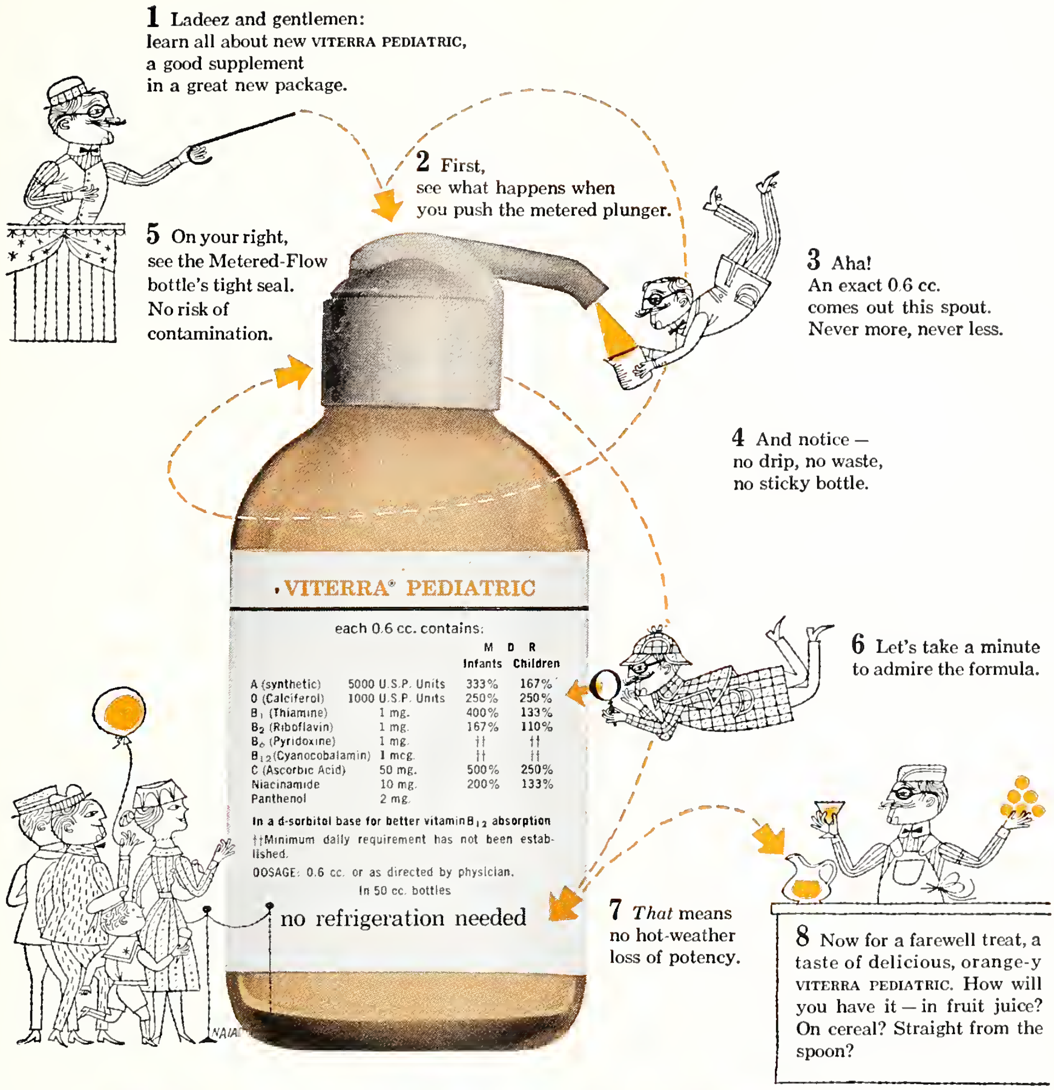
Dr. George F. Lull, the assistant to the President and President of the A.M.E.F., was present and gracious as usual. More than $300,000 in checks from assessments of various states was presented to Dr. Lull before the House. The Board of Directors allocated $100,000 from A.M.A. Funds to the Fund also.

Of principal consideration were the reports of the Board and all councils according to regulations submitted at the interim session. Of primary interest was the report of the Council on Medical Services with its special interest on pre-payment plans. There was also the report of the special commission on Medical Care Plans, on which action was deferred for six months with a request that states comment sixty days prior to the Atlantic City meeting in June. Also of importance was the seventeen state resolution on osteopathy, promulgated primarily by our Delegates as directed by our own House of Delegates in April of 1957. The resolution, as submitted after conference prior to the conclave and for approved state determination by the Reference Committee and House of Delegates, approved referring it to the judicial council for a report back at the Atlantic City meeting after reinvestigation and recognizing that the Osteopaths had removed the objectionable reference to their founders' basic theories for designated cultism.

Also of primary interest was the Alesen report for review of A.M.A. objectives and basic program. The House approved the committee's study with enthusiasm, including the sampling, for which it commended resigning Dr. Frank Dickinson, Ph.D., as well as the Committee, and (1) referred to the Council on Constitution and Bylaws a change of the objectives for June action, (2) liaison with National Medical Societies, including coordination to scientific sessions and (3) disapproved a special committee or council to study Socio-Economics, as it was covered by the new staff and administrative reorganization, and finally (4) approved publication in the *Journal* and the *News* of Socio-Economic articles affecting medicine and health today.

The general subject of aging and federal medical services was handled without change in basic doctrine, except that physicians at all levels were urged to form committees to work with and give guidance to the many other committees studying "the problem" of the care of those over 65.

Action of the Board of Trustees was commended in all 29 of its listed operations. The new *A.M.A.*



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News was commended heartily and repeatedly. The A.M.A. staff, officers, elected officials and delegates were covered while on official business for up to $25,000 accident insurance and a digest of prior policy actions of the House of Delegates is ready for publication with excellent indexing. Civil Defense and Disaster Planning will henceforward have a more prominent place in the *Journal* and *News,* as well as be made available to state and county society bulletins.

The Auxiliary and student A.M.A. were represented and spoke well and the Committee on Medical Practice recommended "relative value studies" (not fee schedules) similar to the California, Iowa or Kansas plans.

There was much emphasis on prepayment medical and hospital service, voluntary health plans sponsored by lay groups, and, of course, "third party" consideration, but generally the guide for relations with the United Mine Workers Welfare Association was left unchanged and third parties were decried, as well as closed panel groups. "Suggested Guides for Prepayment Plans" were available and a "Buyers Guide" set of pamphlets for doctor's waiting rooms and reference libraries will be available. The A.M.A. will sponsor a National Conference on Prepaid Health Insurance.

Interest seemed to be declining in the Medicare (curtailed by Congress) and Vendor programs and definite action was recommended against Veterans Administration Hospital hospitalization of nonservice connected disabilities.

The question of United Fund Drives, including the various health drives, caused a flurry in the House of Delegates, but the policies remained unchanged.

Because of lag of interest in polio inoculations, the program is to be urged at all levels and states were urged to appoint committees for advice to local rehabilitation services. The question of fees for OASDI reports was referred to a newly established committee of the A.M.A. headquarters. The technical and scientific exhibits were generally poorly attended and some discussion was given to future action in this area of concern.

Many amendments to the Bylaws were passed with unanimity to streamline the A.M.A. headquarters staff. This included again the question of service memberships and the internal workings of the Board of Trustees.

The Missouri physicians can be assured that they were well represented and, if, in framing this report, one could stimulate and enthuse all concerned to preserve direct and excellent doctor-patient relations without third party involvement and good medical care recognition of socio-economic changes in a changing world, while holding the brakes against a Welfare State, it would be worthwhile. Further and more detailed reports will be submitted later, but in the meantime every physician in Missouri should examine carefully the basic premises concerning individual rights and the type of dignity we should be proud to maintain, based on scientific investigation, in order to thwart a Congress, soon to meet, in which it is anticipated that not only will the Forand Bill be reintroduced, but many other "welfare state" type of vote getting political bills will come up. The point is that we should not only be basic and scientific, but that we should "investigate!"

SYMPOSIUM ON CHEST DISEASES

The Southwest Chapter of the Missouri Academy of General Practice will sponsor a Symposium on Chest Diseases at the Missouri State Sanatorium, Mount Vernon, January 17 and 18. The symposium is underwritten by the Missouri Chapter of the American Trudeau Society, the Missouri Chapter of the American College of Chest Physicians and the Missouri State Sanatorium.

The meeting will begin with an 8:00 o'clock session on Saturday evening, January 17, with a Clinical Pathologic X-ray conference. The session on January 18 will begin at 8:30 a.m. and continue through the day.

The program will be composed of individual presentations and panels will be presented on "Have We Exhausted Our Case Finding in Chest Diseases," "How Can the Sanatorium Best Serve the General Practitioner" and "Sanatorium Admission Problems."

Among speakers will be M. L. Furcolow, M.D., Kansas City, Kansas; J. Arthur Myers, M.D., Minneapolis, and Karl Pfuetze, M.D., Chicago.

The symposium has been certified by the Academy of General Practice for Category I credit in the amount of nine and one half hours.

Moderators of sessions will be Andrew J. C. McCallum, M.D., Aurora; Kenneth Knabb, M.D., Springfield; Doyle McCraw, M.D., Bolivar, and Kenneth Glover, M.D., Mount Vernon.

SERVICES TO ARMY MILITARY PERSONNEL

Bills may be submitted directly to Headquarters, Fifth U. S. Army, Office of Army Surgeon, 1660 East Hyde Park Blvd., Chicago 15, Illinois, when a civilian medical agency is not cognizant of the appropriate channel for submission of their charges for care furnished Army military personnel. The Headquarters made this announcement, pointing out that as a general rule, civilan medical agencies are informed of the correct procedure, either by prior arrangement with the appropriate military authority for routine medical care of personnel under their jurisdiction, or through notification to the patient's commanding officer, or the Surgeon of the Army area in which emergency type of service is rendered. Such bills should show name, rank, service number, organization and duty station of the patient, disease or disability treated, inclusive dates and nature of the services and a brief statement of the incident leading to the treatment. The announcement points out this should not be confused with the processing of claims for care of eligible military dependents under Medicare.

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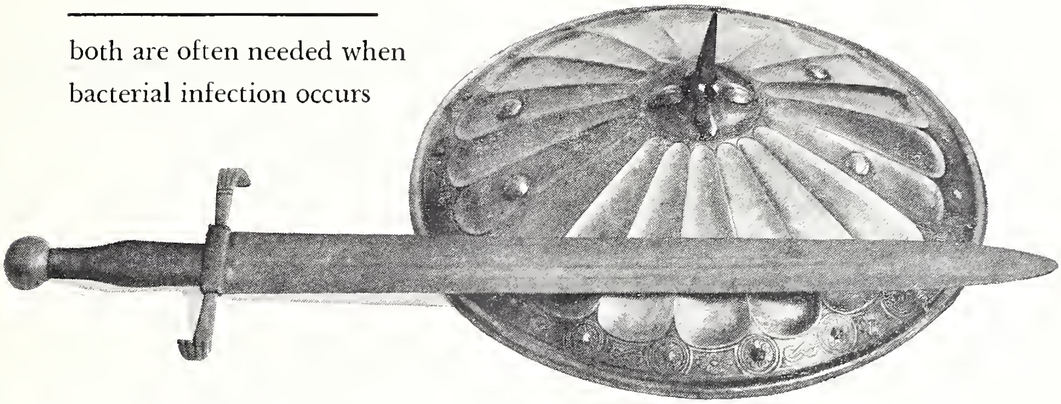

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President's Page

"The modern hospital, its equipment, its able nurses, its technologists of many different skills are essential elements in our care for the patient. Without them, modern medicine could scarcely function." I was glad of the opportunity to make this statement to the Missouri Hospital Association members gathered in Kansas City recently for their 36th annual meeting.

Medical knowledge has grown beyond the capacity of any single physician to encompass it and it has become necessary for doctors to look to others specially qualified to help in both diagnosis and treatment. The hospital with its trained personnel is an integral part of present medical practice.

However, while just praise should be and was given the hospitals for their part and their contribution to medicine today, I deplored to the assemblage that there are trends evident in today's hospitals that are disturbing. There is an increasing tendency in teaching hospitals, and even in general hospitals, to employ full-time staff members and the hospital charge for their services.

Even more disturbing is the growth tendency of municipal hospitals and charity clinics to impose a charge for the freely-given services of volunteer staff members. In many cases such proceeds go into research funds for worth-while projects, but the trend away from the traditional way of providing care through public and charity hospitals is definitely being set.

Medicine is certainly not a static science and it is not to be expected that institutions allied with medicine will remain unchanged; in fact, this is the last thing that the medical profession would desire. At the same time, the medical profession is not completely happy with some of the changes that are occurring.

EDITORIALS

Labor Is Back With Forand Bill

The physicians' main legislative battle in Congress once again appears to be the labor-backed Forand bill to provide free hospitalization and surgical care for social security recipients.

This year, however, the doctors start the session with strong allies and are better organized to seek answers to lower health care costs for the aged.

The American Dental Association, American Hospital Association and the American Nursing Home Association have joined the American Medical Association in this effort by forming the Joint Council to Improve the Health Care of the Aged. The Joint Council is planning a national conference for this spring.

WILL NEED ALL HELP AVAILABLE

It is good the health field is organized in this project because it will take its concerted effort to hold back labor in its push for the Forand bill.

Labor already has given the word the Forand legislation is again very high on its list of goals for this session of Congress. As the president of the AFL-CIO said after the recent general election:

"The American people on November 4 very emphatically indicated that they do not agree with those political leaders who have little faith in the dynamic character of our national economy. By an overwhelming vote, they elected to Congress new senators and representatives who want to forge ahead and properly utilize our nation's human and natural resources to build a better world for all. By the same vote, they retired many members of Congress who have followed a stand-still policy."

The labor chief added this was not the time to "raise false issues," but "the time to give the American people the program for which they have voted . . . ," the Washington office of the AMA reported.

AMA HEAD TELLS OF DUTY

Dr. Gunnar Gundersen, AMA president, discussed the physicians' obligation to the aged at the interim session of the AMA last month in Minneapolis. He told the House of Delegates that physicians have created this problem by lengthening the life span.

The AMA president urged physicians to accept their full share of this responsibility by solving the medical and socio-economic issues raised by the ever-increasing number of senior citizens.

Another speaker at the AMA session, Gov. Orville L. Freeman of Minnesota, was a bit more pointed in his comments. Referring specifically to the Forand bill, he said:

"Now, you (physicians) certainly have the right to oppose such legislation if you believe it would be harmful to your profession. You have the duty to oppose it if you believe it would be harmful to the public. But if you do oppose it you also have the responsibility of helping to work out an alternative program to meet the need that we all know exists and becomes more serious every day."

Governor Freeman's remarks probably sum up rather well the feelings of many of our legislative leaders who are going to be subjected to the pressure from labor.

MANY STUDIES BEING MADE

It is hoped the legislators will hold up action on the Forand measure until the various studies being done can be completed and considered. The Department of Health, Education and Welfare is conducting one, under instructions from the House Ways and Means Committee. It was this committee that held up the Forand bill last year. Another study is being made by a subcommittee of the Senate Welfare Committee.

A third study is to be conducted by each state. It will culminate in a White House Conference of Aging in January, 1961. In addition the insurance industry, as well as Blue Cross and Blue Shield plans, are examining ways to make their coverages more available and attractive to the oldsters.

Curiously though the older people on Social Security have not been the ones to raise the concerted clamor for the free medical care.

Instead it has been the labor leaders who seem to be the self-appointed spokesmen for this group of voters.

TREMENDOUS LATENT VOTING POWER

Also this group of 13 million citizens could become a mighty potent bloc of votes—if properly organized and directed. Their number also will grow through the years.

Granted, there are cases of individual hardship within this group because of unavoidable hospital and medical expenses. But there always have been and always will be financial hardships within any group for one reason or another.

So is this sufficient reason for our political leaders to invite socialized medicine in the front door?

Why not socialize the shoe industry, food, motor cars, or the lawyers or other professions?

Perhaps labor's main interest in the medical welfare of the retired oldsters is political. The labor leaders already have seen what a fine web health and welfare fringe benefits make to bind members to the union.

Whatever labor's reason, you can be sure its leaders will not want to wait for the outcome of the studies underway. As they already have indicated, the recent Democratic victory is being taken as a mandate from the public for labor-backed legislation. Whether individual voters knew they were casting votes for the Forand bill is a moot question.

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Musings of the Field Secretary

A dedication ceremony of the new Texas County Memorial Hospital of Houston, Missouri, was held at the hospital, Tuesday afternoon, November 25. Former President Harry S. Truman was the principal speaker. Mr. Truman was lavish in his praise of the people in Texas County for their efforts in the establishment of this hospital. He told the crowd of some 2,500 people how he had supported the Hill-Burton Hospital Construction Act from its inception. The hospital received a grant equal to one half of its cost through this act. Mr. Truman in his comments concerning the splendor of the hospital and its equipment, coupled with the competent medical staff and auxiliary personnel, said that he had told Dr. Wallace Graham to bring him here should he need hospitalization.

Former President, Harry S. Truman, was seated with other dignitaries.

Mr. Truman was the principal speaker.

Among other political dignitaries present at the ceremony were Charles H. Brown, Springfield, Missouri, representative in Congress, Seventh District; A. S. J. Carnahan, Ellsinore, Missouri, representative in Congress, Eighth District; and Richard H. Ichord, Houston, Missouri, State Representative from Texas County.

The Texas County Memorial Hospital is a one story brick structure with a 34 bed capacity. It is located on the southern outskirts of Houston, the county seat of Texas County (the largest county in the state geographically speaking). Nine physicians comprise the active staff. Garrett Hogg, Jr., M.D., Cabool, is chief of staff; T. J. Burns, M.D., Houston, is chief of surgery; John Tarr, M.D., Houston, is chief of medicine, and Paul Beckman, M.D., Houston, is chief of obstetrics and gynecology. At present there are seven registered nurses, eight practical nurses and eight nurses' aides, making up the nursing personnel. The hospital began operation in early December. The administrator is Mr. Charles Broome, Jr., Houston.

Dr. Hogg and Dr. Burns were in the group.

Another new hospital in that area, to begin operation soon, is the West Plains Memorial Hospital. This hospital also received funds under the federal Hill-Burton Hospital Construction Law.

NEW MEMBERS

Brennan, George A., M.D., 3606 Gravois Ave., St. Louis 16. St. Louis Medical Society.

Florian, Albert J., M.D., 1224 W. 69th Terrace, Kansas City. Jackson County Medical Society.

McManamon, Thomas V., M.D., 111 Church St., Ferguson. St. Louis County Medical Society.

Masucci, Joseph C., M.D., 316 Argyle Bldg., Kansas City. Jackson County Medical Society.

Triska, Roland A., M.D., 635 Missouri Theatre Bldg., St. Louis 3. St. Louis Medical Society.

Van Buskirk, Terrance E., M.D., St. Joseph's Hospital, Kansas City. Jackson County Medical Society.

Windhorst, Dorothy B., M.D., 512 Purdue Ave., St. Louis 5. St. Louis Medical Society.

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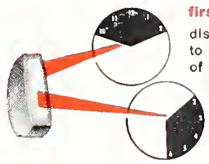

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News

John J. Hammond, M.D., St. Louis, was elected president of the St. Louis Heart Association at its annual meeting October 15. Dr. Hammond succeeds **David B. Flavan**, M.D., St. Louis, who was given the association's distinguished service award for his two years of service in the office of presidency. Speakers at the meeting were **Richard J. Bing**, M.D., St. Louis, professor of medicine at Washington University, and **James G. Janney, Jr.**, M.D., associate professor of clinical medicine at St. Louis University.

Charles E. Lockhart, M.D., Springfield, was elected secretary of the Missouri Division of the American Cancer Society at a meeting in Jefferson City. Dr. **Claude J. Hunt**, Kansas City, was re-elected president.

The *Weston Chronicle* on October 23 carried a picture and article about **L. C. Calvert**, M.D., Weston, who celebrated the 50th anniversary of his graduation from Jefferson Medical School, Philadelphia, 1908.

Robert R. Donley, M.D., Monett, has accepted the position as chairman of the North Barry County Red Cross chapter for the year 1959.

Thelma C. Buckthorpe, M.D., Sikeston County health officer, recently attended a seven-state meeting at Kansas City where health officers, doctors and public health officials held a conference on "Streptococcus."

"Your Doctor Discusses Children's Diseases, Inoculations and Dental Care" was the subject of a talk by **James VanBiber**, M.D., Independence, at a pre-school meeting October 28 in Rock Creek, Missouri.

E. A. Thompson, M.D., Columbia, celebrated her 90th birthday on November 2, 1958. Dr. Thompson was one of the first women doctors in Missouri and practiced medicine in the state for 58 yeras.

Henry E. Oppenheimer, M.D., Clayton, was chairman of the St. Louis Diabetes Detection Week which was held November 16-22.

New officers for the State Board of Medical Examiners are **W. S. Sewell**, M.D., Springfield, president; **James W. Willoughby**, M.D., Liberty, vice president; and **Edwin F. Vitt**, M.D., St. Louis, secretary-treasurer.

E. Lee Dorsett, M.D., St. Louis, assistant professor of obstetrics and gynecology, St. Louis University, will spend several weeks in Port-au-Prince, Haiti, where he expects to give several lectures at the Medical School of Haiti at Port-au-Prince.

On October 20 **Ernest Spitzer**, M.D., University City, was voted honary membership in the St. Louis Dermatological Society.

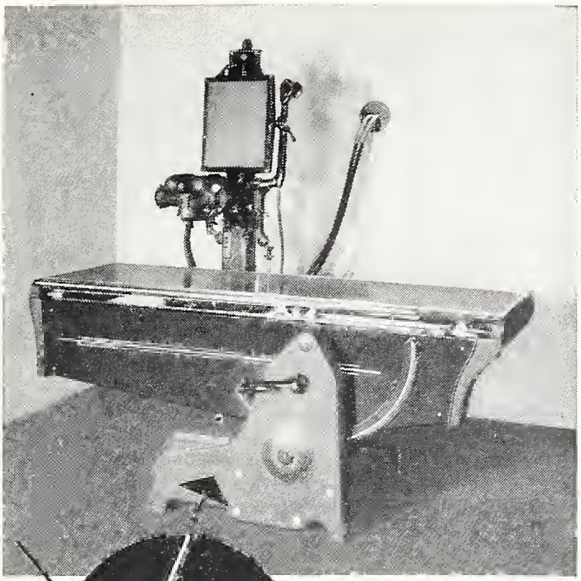
Rodgers Deakin, M.D., St. Louis, presented a paper "Bladder Neck Obstruction in Children," before the Chicago Urological Society on November 19.

The seventh Postgraduate Course in Diabetes and Basic Metabolic Problems of the American Diabetes Association will be held in St. Louis January 21-23. **William H. Olmsted**, M.D., St. Louis, is director, and **Henry E. Oppenheimer**, M.D., St. Louis, is codirector of the course. St. Louis, Washington and Missouri universities schools of medicine will cooperate in the course.

Robert W. Bartlett, M.D., St. Louis, on November 20 addressed the 66th annual meeting of the Western Surgical Association held at the Mayo Clinic, Rochester, Minnesota. The subject of his paper was "A 30 Year Follow-up of Thyroidectomy for Exophthalmic Toxic Goiter."

The Missouri State Board of Medical Examiners has scheduled an examination to be given in Kansas City on January 9 and 10, 1959. All applications are to be filed at least 30 days before the examination.

The Greater St. Louis Society of Clinical Hypnosis will meet at the Jewish Hospital, St. Louis, at 8:30 p.m. on January 14. Induction technics, problems in handling resistances and common problems encountered by workers in the field of hypnosis will be discussed.



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Councilor District News

FIRST COUNCILOR DISTRICT

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Grand River Medical Society

The Grand River Medical Society met November 13, 1958, at the Strand Hotel, Chillicothe. There was a good attendance of members, Auxiliary members and guests. The Auxiliary, after dinner, held a separate meeting.

The scientific program was presented by Dr. H. O. Loyd, Jefferson City, a staff member, Department of Medicine, University of Missouri Medical School, who discussed "Common Hematological Problems." This was an excellent presentation of an important subject and was followed by questions and answers.

A committee on Health Programs, Drs. E. W. Allen, C. L. Clark and W. F. Fair, reported. They suggested that the secretary write Dr. H. M. Hardwicke, Acting Director, Missouri Division of Health, inviting him to be the guest speaker at the January meeting.

This being the night of annual election, at the recommendation of the nominating committee, the following officers were elected for 1959: President, Dr. E. W. Allen; First Vice President, Dr. R. W. Smith; Second Vice President, Dr. C. L. Clark; and Secretary-Treasurer, Dr. E. A. Duffy.

It was regularly moved, seconded and carried by unanimous vote, that county dues be raised from $3.00 to $5.00 annually.

The minutes of last meeting were read and approved. There being no further business the Society adjourned.

E. A. Duffy, M.D., *Secretary*

SECOND COUNCILOR DISTRICT

B. L. MURPHY, HANNIBAL, COUNCILOR

A dinner meeting of the Second Councilor District of the Missouri State Medical Association was held at the Mark Twain Hotel, Hannibal, Tuesday evening, November 18. The festivities began with a social hour at 6:00 p.m., followed by dinner and then the scientific program.

The latter part of the evening consisted of a "Panel on Trauma." Those participating in the panel discussion were: Leonard T. Furlow, M.D., St. Louis, associate professor of clinical neurological surgery, Washington University School of Medicine; Oscar P. Hampton, Jr., M.D., assistant professor of clinical orthopedic surgery, Washington University School of Medicine, and Carl E. Lischer, M.D., assistant professor of clinical surgery, Washington University School of Medicine. Dr. Furlow spoke on "Head Injuries," Dr. Hampton on "Injuries of the Extremities" and Dr. Lischer on "Abdominal Injuries."

After formal presentations on these subjects the session was thrown open for general discussion with audience participation. Numerous questions were directed to the panel members which produced a most interesting follow-up of the practical, well presented informal talks.

The meeting had a good attendance.

Drs. Lischer, Hampton and Furlow were the speakers.

Forty physicians were in attendance including a number of physicians from the Lincoln-St. Charles Society in the Fourth Councilor District, and from Quincy, Illinois.

B. L. Murphy, M.D., Hannibal, Councilor of the Second District, presided at the meeting. The local arrangements were taken care of by Dr. J. H. Walterschied, Secretary of the Marion-Ralls-Shelby County Medical Society.

B. L. Murphy, M.D., *Councilor*

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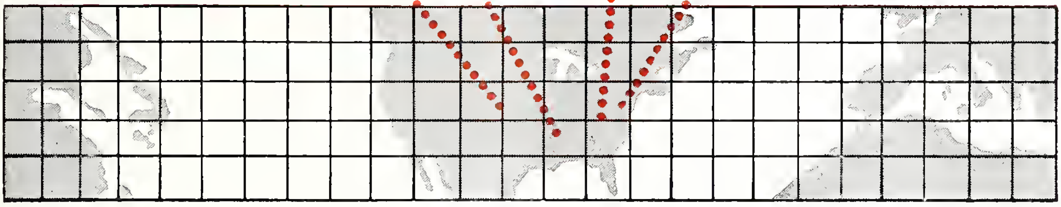

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References: 1. Smigel, J. O., et al.: J. Am. Ger. Soc., in press. 2. Freedman, A. M.: Pediat. Clin. North America **5**:573 (Aug.) 1958. 3. Ayd, F. J., Jr.: New York J. Med. **57**:1742 (May 15) 1957. 4. Menger, H. C.: New York J. Med. **58**:1684 (May 15) 1958. 5. Coirault, M., et al.: Presse méd. **64**:2239 (Dec. 26) 1956. 6. Bayart, J.: Presented at the International Congress of Pediatrics, Copenhagen, Denmark, July 22-27, 1956.

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Chariton-Macon-Monroe-Randolph County Medical Society

A dinner meeting of the Chariton-Macon-Monroe-Randolph County Medical Society was held Thursday evening, November 13, at the Woodland Hospital in Moberly.

The scientific program, a CPC, was presented by three staff members of the University of Missouri School of Medicine, namely, Dr. J. E. Flynn, professor of pathology, Dr. Thorpe Ray, professor of medicine, and Dr. Hugh Stephenson, professor of surgery.

The business part of the meeting was composed chiefly of the election of society officers for 1959. They are as follow: Dr. C. C. Weger, Keytesville, president; Dr. Howard Miller, Macon, vice president; Dr. Josephine Baker, Moberly, secretary-treasurer.

Delegates to the State Convention: Chariton County, G. W. Hawkins, M.D., Salisbury, alternate, G. C. Rice, M.D., Brunswick; Macon County, J. E. Campbell, M.D., Macon, alternate, D. E. Eggleston, M.D., Macon; Monroe County, F. A. Barnett, M.D., Paris, alternate, G. M. Ragsdale, M.D., Paris; Randolph County, A. P. Rowlette, M.D., Moberly, alternate, C. C. Smith, M.D., Moberly.

Censors: Randolph County, L. E. Huber, one year; Chariton County, F. L. Harms, two years; Macon County, Howard Miller, three years; Monroe County, G. M. Ragsdale, four years.

Those in attendance for the meeting were: Drs. Baker, Chute, C. C. Cohrs, J. W. Fleming, Thomas S. Fleming, Robert Hasson, L. E. Huber, L. K. McMurtry, C. C. Smith, S. R. Szymanski and R. H. Young, Moberly; James E. Campbell, G. D. Collins, D. E. Eggleston and H. S. Miller, Macon; F. A. Barnett, Paris; P. V. Dreyer, Huntsville; C. C. Weger, Keytesville; F. L. Harms and G. W. Hawkins, Salisbury; and G. C. Rice, Brunswick.

Robert H. Young M.D., *Secretary*

FOURTH COUNCILOR DISTRICT

JOSEPH C. CREECH, TROY, COUNCILOR

Jefferson County Medical Society

A meeting of the Jefferson County Medical Society was held on Tuesday evening, November 4, with a high percentage of the membership present.

The meeting was opened by Dr. McKinstry, President, who introduced Dr. Guy Magness, University City, the speaker for the evening.

Dr. Magness is the representative of the Fourth Councilor District on the special committee set up by the House of Delegates at the April 1958 session of the Missouri State Medical Association in St. Louis. This special committee is to study requests for councilor district changes brought before the House of Delegates at the 1958 session. Dr. Magness reported on the first meeting of the committee and asked for suggestions from the Society.

The Society met on November 4.

At the conclusion of the discussion of this matter some time was spent in discussing various phases of the Jefferson County pilot health survey.

Guests, in addition to Dr. Magness, included Mr. Ray McIntyre, Field Secretary of the Missouri State Medical Association.

John F. Rutledge, M.D., *Secretary*

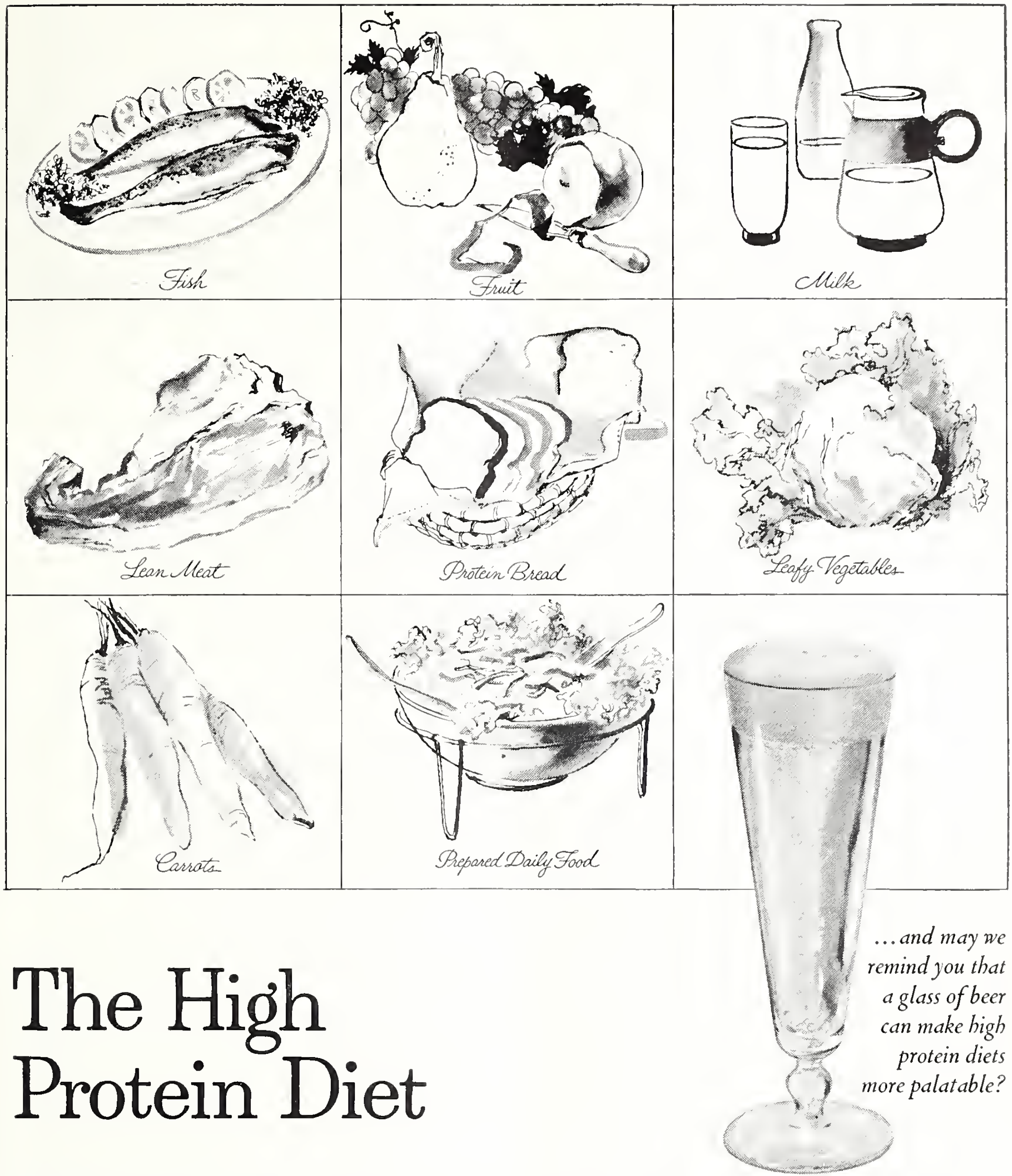
FIFTH COUNCILOR DISTRICT

BYRON M. STUART, BOONVILLE, COUNCILOR

Audrain County Medical Society

The Audrain County Medical Society held a joint dinner meeting with the Callaway and Montgomery County Medical Societies on Monday eve-

Dr. Cannon was the speaker.



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ning, November 17, at the Jefferson Hotel Tea Room, Mexico.

The meeting was called to order by the President, Dr. Leonard L. Davis.

The guest speaker for the evening was Edward M. Cannon, M.D., St. Louis, Department of Urology, St. Louis University School of Medicine. Dr. Cannon gave an interesting talk on "The Office Management of Some Common GU Problems."

Dinner preceded the scientific meeting.

The following doctors were present for the meeting: Drs. Leonard L. Davis, Thomas L. Dwyer, Lawrence Epple, Ernest Gantt, Ben N. Jolly, Fordon Shaw, William Jolly, E. S. Wallace, Harold Lankford, Ned Rodes, Harry F. O'Brien, Mexico; F. A. Barnett, Paris; L. L. Lachance, Centralia; James E. Hill, George Groce, R. N. Crews, Fulton, and Mr. Ray McIntyre, St. Louis.

The meeting adjourned at 10:00 p.m.

Harold D Lankford, M.D., *Secretary*

SIXTH COUNCILOR DISTRICT

C. G. STAUFFACHER, SEDALIA, COUNCILOR

Joint County Medical Societies Meeting

A joint dinner meeting of physicians and their wives from Henry, Johnson, Pettis, Saline and adjacent counties was held at the "Old Homestead" in Sedalia, Wednesday night, November 19. Eighty people were present to join in the evening's program which included a social get-together, smorgasbord dinner, and then the formal program. Following the delicious dinner the ladies retired to a separate room where a special program had been arranged for them.

The doctors were privileged to hear H. M. Hardwicke. M.D., Acting Director, Missouri Division of Health, Jefferson City. He spoke on "Mutual Problems Facing the Missouri Division of Health and the Medical Profession of This State."

The wives attended the dinner.

Dr. Hardwicke discussed various functions of the Division of Health which are established by law in Missouri and pointed out the need for cooperation of the Division of Health and the practicing physicians of the state in order to give the people of the State of Missouri maximum health protection. He explained the function of the public health nurse, pointed out how well-baby clinics were operated as well as the two premature baby centers in the state, explained immunization programs sponsored by the Division of Health, and cited some of the activities of the state laboratories and other departments of the Division. His informative discussion stimulated numerous questions from those present and gave the entire group helpful information in regard to public health matters in this state.

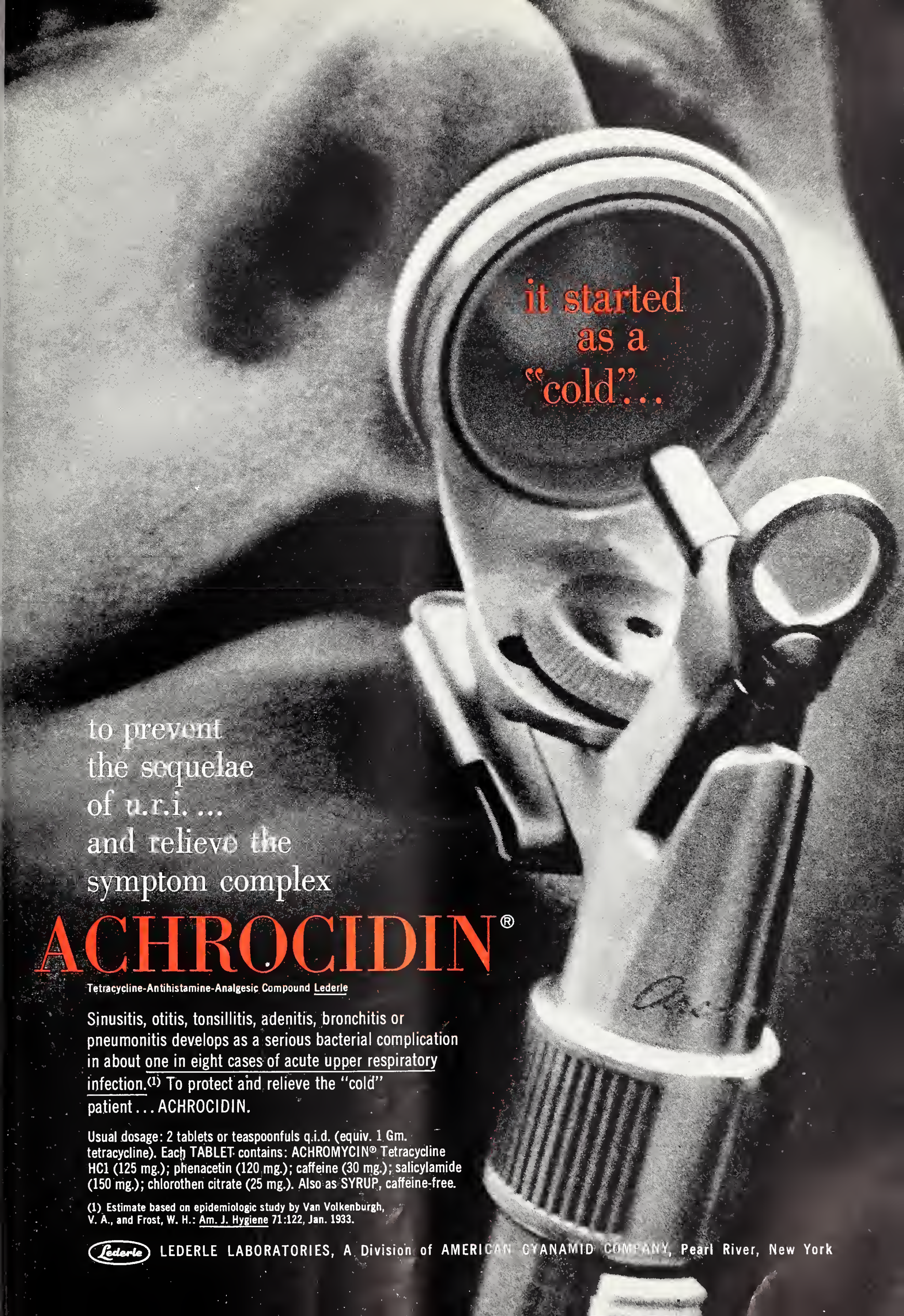
Discussion continued after the meeting.

The arrangements for this meeting were handled by the officers of the Pettis County Medical Society.

C. G. Stauffacher, M.D., *Councilor*

West Central Counties Medical Society

Wayne L. Hart, M.D., Mercy Hospital, Kansas City, Missouri, gave the scientific program at a



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(1) Estimate based on epidemiologic study by Van Volkenburgh, V. A., and Frost, W. H.: Am. J. Hygiene 71:122, Jan. 1933.

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dinner meeting of the West Central Counties Medical Society for the doctors and their wives, Thursday evening, November 13, at the Inn Hotel, Butler.

The evening's festivities began with a social hour at 6:00 p.m., followed by dinner and then the program by Dr. Hart. He spoke on the subject "Metabolic Problems of Childhood."

Jack Moody, M.D., *Secretary*

EIGHTH COUNCILOR DISTRICT

W. W. TILLMAN, SPRINGFIELD, COUNCILOR

Jasper County Medical Society

November 11 Meeting

A regular meeting of the Jasper County Medical Society was held on November 11 at Twin Hills Golf and Country Club, Joplin.

The meeting was called to order by the president, Robert Kirschman, M.D. Forty-five members were present.

Dr. Bart F. Wooldridge introduced Drs. H. E. Stephenson, Jr., Kenneth K. Keown and Jack Martt, University of Missouri Medical School, Columbia, composing a panel which discussed the topic, "The Correction of Heart Lesions Utilizing Open Cardiotomy and Cardioplegia."

Upon motion duly made and carried a reading of the minutes of the last regular meeting of the Society was waived and the minutes ordered approved as written.

Report of the legislative committee was given by Dr. W. T. McNew, Chairman. Dr. McNew advised that the Legislative Committee had considered the suggestion of Dr. Tillman as to changing the date for the election of officers and delegates to comply with by-law requirements of the State Association. He stated that the Committee's written recommendations would be presented to the Council at its next regular meeting, since the recommendations would involve a constitutional amendment.

Postgraduate education committee was reported by Dr. W. Russell Smith, chairman. Dr. Smith stated that the committee had received a letter from the University of Kansas Medical Center advising that the University could not honor the request for a postgraduate medical education course this year. However, it appeared that the University of Kansas Medical Center may be in a position to offer such a course for next year and Dr. Smith was encouraged by the Society to request such a course for next year.

The executive secretary gave a summary of the matters taken up by the council at its regular meeting immediately preceding the Society meeting. One such matter acted upon is as follows:

"Upon motion duly made and carried it was resolved that the Society would be hosts at a meeting at Joplin on March 10, 1959, of all doctors in the Eighth District as suggested by the Eighth District Councilor, Dr. W. W. Tillman, in his letter of September 29, 1958, to Dr. Virgil E. Jeans, program chairman. The executive secretary was directed to inform Dr. Tillman by letter of the Society's desire to have such meeting at Joplin."

There being no further business to come before the meeting, on motion duly made and carried, the meeting was adjourned.

John W. Koehler, M.D., *Secretary*

Ozarks Medical Society

The November meeting of the Ozarks Medical Society and the doctors' wives was held November 11 at Ferrell's Dinner House in Aurora with Drs. A. J. C. McCallum and F. B. Brown acting hosts. After a delicious fillet dinner, Vice President L. T. Taylor of Neosho introduced the hosts and the 8th District Councilor, Dr. Walter Tillman, of Springfield, who introduced Dr. and Mrs. H. M. Hardwicke. Dr. Hardwicke, Acting Director, Missouri Division of Health, Jefferson City, presented the program with a discussion of the function and limitations and handicaps of the State Division of

Dinner preceded the meeting.

The audience was attentive.

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Health. Following this, a frank, forum discussion, moderated by Dr. Tillman, was held with various members of the society participating.

At the business part of the meeting Dr. F. F. Alsup was introduced as a new member in good standing by virtue of transfer from the Honolulu Medical Society.

Dr. Hardwicke was the speaker.

The Blue Cross members voted unanimously to accept series 11 Blue Cross in place of series 10.

The next meeting is to be held in Mount Vernon, December 9 at the Missouri State Sanatorium.

A. J. Graves, M.D., *Secretary*

NINTH COUNCILOR DISTRICT

J. H. SUMMERS, LEBANON, COUNCILOR

South Central Counties Medical Society

The South Central Counties Medical Society met for dinner at Tiny's Steak House in Cabool on Wednesday night, October 29, 1958.

Guests included Dr. and Mrs. Harry Silsby and Dr. and Mrs. Stanley Peterson, Springfield. Mrs. Henry Bauman, Maryville, Missouri, President of the Auxiliary of the Missouri State Medical Association, was also a guest. Mrs. Peterson is president-elect of the Auxiliary of the Missouri State Medical Association.

Following the dinner the ladies were guests of Mrs. Garrett Hogg, Jr. Dr. Harry Silsby spoke to the members on "Cardiovascular Degenerative Diseases." An interesting discussion followed his talk.

Dr. Joe Spears, President-Elect of the Society, in the absence of the President, Dr. M. L. Fowler, conducted a short business meeting following the scientific session. The Society voted to give Texas County Memorial Hospital authorization to be a participating member of the Blue Cross.

The secretary of the Society was authorized to contact Blue Shield in St. Louis to get information on adding Blue Shield benefits to the Society's Blue Cross plan.

Members and their wives present included Drs. Spears, Hogg and Wilbur, Cabool; J. R. Tarr and T. J. Burns, Houston; D. E. Tiffany, Mountain View; C. W. Cooper, Thayer; and Callihan, Wiles and Smith, West Plains.

The next meeting will be in West Plains on Wednesday, November 19 with Dr. J. N. Wiles as host.

Rollin H. Smith, M.D., *Secretary*

Mid-Missouri Medical Society

Edgar L. Clayton, M.D., Springfield, spoke at a dinner meeting of the Mid-Missouri County Medical Society at the Rock Court Cafe in Lebanon, on Thursday night, November 20. He discussed the subject "Some Allergic Manifestations in Children." This was an interesting and practical program.

The doctors' wives also attended the evening's offerings.

M. K. Underwood, M.D., *Secretary*

TENTH COUNCILOR DISTRICT

BEN M. BULL, IRONTON, COUNCILOR

Mineral Area County Medical Society

A meeting of the Mineral Area County Medical Society was held Thursday evening, November 20, in the Clinic Building of the State Hospital in Farmington.

The program for the evening, sponsored by the Missouri Academy of General Practice, presented John Byrne, M.D., St. Louis, Department of Neurology, St. Louis University School of Medicine, who spoke on "Ureteral Injury—Recognition and Treatment." This was a most interesting program and those in attendance expressed their pleasure following the close of the meeting.

J. L. Foster, M.D., *Secretary*

DEATHS

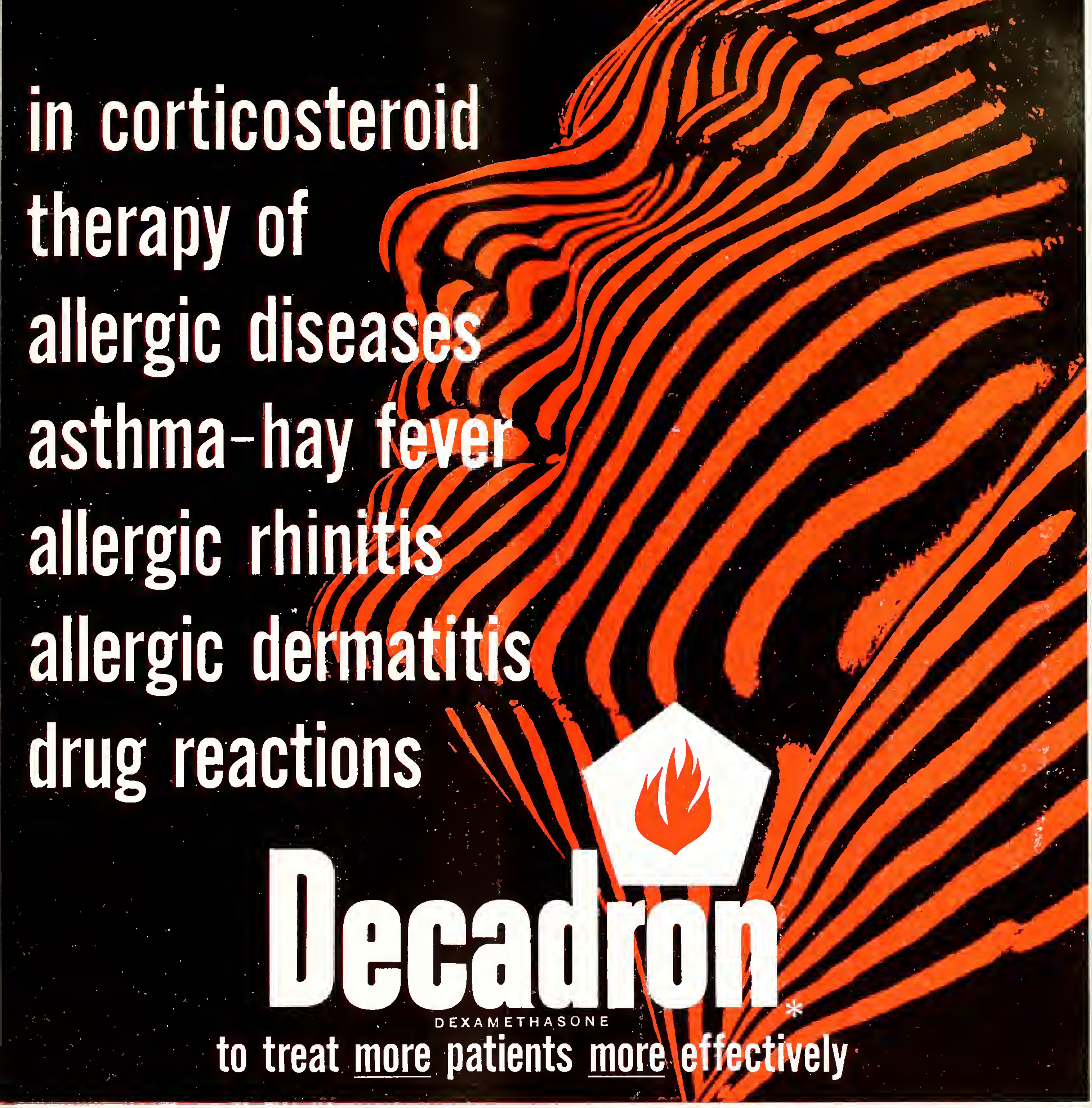
Wiatt, William S., M.D., La Jolla, California, a graduate of Central University, 1897; member of St. Louis Medical Society; aged 86; died October 14.

Beisbarth, Albert, M.D., St. Louis, a graduate of Beaumont College of Medicine, 1899; member of St. Louis Medical Society; aged 80; died October 16.

Kearney, Elmer F., M.D., Oregon, a graduate of Barnes Medical College, 1906; member of Holt County Medical Society; aged 78; died October 22.

Schauffler, R. McE., M.D., Kansas City, a graduate of Physicians and Surgeons Medical College, 1896; member of Jackson County Medical Society; aged 87; died October 30.

Arthur, William J., M.D., Kansas City, a graduate of the University of Kansas, 1953; member of Jackson County Medical Society; aged 39; died November 16.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Correspondence

The Medical Institute of Local 88

November 12, 1958

To the Editor:

As one engaged in the private practice of surgery and with some experience and interest also in planning for health and medical care of individuals in our community, I would like to answer some of the questions proposed by Dr. W. F. Francka, our President, in his editorial Nov. 1958.

Dr. Francka's admitted "surprise" about the trends and accomplishments of the cooperative efforts of union welfare programs and the medical profession, as in the case of the Medical Institute of Local 88 in St. Louis, is another evidence that we as doctors have not generally been alert to changes and advancements in the practical application of health care as we have been in keeping up with our advances in the science of medicine.

Dr. Francka raised the question, "Why would the meat cutter be told to get a physical examination each year?" and expressed fear about the "free choice of whether a butcher wants an annual physical examination or not." The current teaching in all of the schools today is that good preventive medical care begins with at least an annual physical examination. At a recent meeting of the union members they vociferously and with much enthusiasm proclaimed their desires for establishing a preventive medical care program for themselves on a prepaid basis.

Just as important a part of the answer to Dr. Francka's question is that the Medical Institute of Local 88 is merely conforming to the requirements set both by laws and public health standards for the periodic health examination of food handlers. That these standards have not been met in the past and that they will henceforth be met through the joint efforts of management and labor is an obvious credit to these people.

It should be pointed out that the union members are in no way compelled to use the facilities of the Institute but are free to go to the physician of their choice for these examinations or any other medical care.

The Medical Institute of Local 88 was developed with the counsel and approval of the Committee on Industrial Care of the St. Louis Medical Society and strictly according to the "Guides of Evaluation of Management and Union Health Centers" of the American Medical Association. The Council on Medical Care of the AMA thought enough of this program during its development stage to invite me, as its Chief of Staff, to participate in their deliberation last month in Chicago, along with representatives of several other outstanding American health programs.

The American Medical Association Committee on Medical Care for Industrial Workers has conducted a comprehensive and detailed survey of twenty-nine representative union health centers throughout the United States and is in the process presently formulating a report which will be presented at the next meeting of the House of Delegates and which no doubt will reach all members of the profession. For Dr. Francka (like many of us in the profession) "surprised" by the popularity of this union medical service plan with its members, surprise will be converted to amazement by the forthcoming glowing AMA report.

Development of these programs is a trend of the times and while such have long existed in cur city and state under the tutelage and sponsorship of management and few unions, most union programs are relatively new, but are not different in principle from those which already exist. There is need for the medical profession to exercise an active and dominant role in the development of these programs so as to assure a high quality of medical care in accord with the highest principles of medical practice as achieved under private enterprise and with the code of medical ethics as long known and developed by our profession.

Dr. Francka will be pleased to learn that there is complete physician control of the medical program of the Medical Institute, with every guarantee for medical staff independence in the making of policy and medical programming and individual patient care. Dr. Francka's recognition of the benefit and accomplishments of this program are well put and indicate his dispassionate and impartial analysis of the potential of the program. Those of us participating with the Medical Institute make no claims for doing anything better than any other doctors or other programs can do, but at least we are attempting to answer the call of a group of people who have appealed to us to set up for them the best possible preventive medical program which we are able to do with the available scientific medical means at our command, and we are attempting to do this humbly and even experimentally with, thus far, the cooperation and blessing of both management and union members, as well as with the health and medical agencies and other personnel of our medical community.

To Dr. Francka and all other members of our society, I extend a cordial invitation to visit the Medical Institute at any time and make any constructive criticism since it is only in this manner that the best needs of both the profession of medicine and individuals covered under service plans can be assured.

(Signed) Cyril Costello, M.D.
Medical Chief of Staff

From the Medical Schools

WASHINGTON UNIVERSITY

Lecture, Visitors

Dr. J. Dixon Boyd, M.Sc., M.D., professor of anatomy, Cambridge University, England, delivered the annual Robert J. Terry lecture November 17, in the David P. Wohl, Jr., Memorial Hospital auditorium. He discussed "The Human Placenta." The lecture is sponsored by Washington University School of Medicine. An international authority on embryology and coauthor of one of the leading embryology textbooks, Dr. Boyd was formerly professor of anatomy at the London Hospital School of Medicine, University of London. He was among 35 international authorities participating in a conference of the Association for the Aid of Crippled Children held in November in Princeton, N. J. Dr. Edward W. Dempsey, dean of Washington University Medical School and head of the department of anatomy, and Dr. Jack Davies, Washington University associate professor of anatomy, also participated. The conference, "Survey of the Placenta and Fetal Membrane," is the first of a series that will follow the developmental pattern of infectious disease in children from conception to adulthood. Two other conference participators, Dr. Emanuel C. Amoroso, professor of physiology at the Royal Veterinary College at the University of London, and Dr. Fritz Fuchs, lecturer in obstetrics and gynecology at the University of Copenhagen, Denmark, were November guests of the department of anatomy. Dr. Amoroso has been appointed visiting professor. The Robert J. Terry lecture, established in 1938, honors Dr. Terry, professor emeritus of anatomy, who introduced reforms in the teaching of human anatomy. He presented these reforms in a book, *Introductions to the Study of Human Anatomy* published in 1929. Now 87, Dr. Terry is visiting his daughter Mrs. Celeste Forbes, in Weston, Mass. Dr. Terry was graduated in 1895 from the Missouri Medical College, forerunner of Washington University School of Medicine. He joined the university faculty after graduation and become head of the department of anatomy in 1900, a position he held until his retirement from teaching in 1941.

Groundbreaking

Groundbreaking ceremonies for the new David P. Wohl, Jr., Memorial-Washington University Clinics were held Tuesday, November 18, at the building site on the south side of Audubon Avenue, east of David P. Wohl, Jr. Memorial Hospital. Construction began immedately with completion planned within two years. Basic construction contracts of $3,068,500 have been awarded Alport Construction Company of St. Louis. Furnishings, equipment, surveying costs and other fees will bring the total cost of the structure to $3,415,886. The 12-story building will have ten floors above ground and two below. Majority of construction funds for the new building will be provided by a $2,000,000 donation from the Wohl Foundation and Mr. and Mrs. David P. Wohl. The Kresge Foundation contributed $100,000 toward the cost of clinic areas to permit further development of the outpatient training program for medical students. A $10,000 gift from Sunnen Products; Medical School reserve funds, a grant of $743,238 from the Health Research Facilities of the U. S. Public Health Service and a federal grant of $115,689 made under terms of the Hill-Burton Act comprise remaining funds.

Five floors of the new building will be used for relocation of the present Washington University Clinics, now in cramped quarters in the building facing Euclid Avenue. Orthopedic, general urology and surgical clinics will be on the second floor; neuro-surgery, psychiatry and neurology clinics on the third; obstetrics and gynecology, the fourth and general medical clinics on the fifth. Each of the clinic floors includes waiting areas, examining rooms, laboratories and other special purpose rooms. The clinic entrance will be off Renard Bridge, which spans the Wabash railroad tracks. Construction was made possible through an easement granted Washington University by the railroad, through Arthur K. Atkinson, Wabash president. Renard, Wohl and Barnard Hospitals will all be connected with the new building at first-floor levels, and Wohl Hospital will be connected at all levels. Ground floor of the new building will provide research laboratories and the seventh 225. The main receiving area, pharmacy, general laboratory, adminstrative offices and an emergency suite will be on the first floor. The sixth floor will provide research laboratories and the seventh through the tenth floors will also be devoted to research. An intermediate floor level, between the clinics and the research facilities, will be used for medical record storage. Basement level space in the old Washington University Clinics building will be assigned to Barnes Hospital for use as storage and mechanical areas. The first and second floors will be remodeled and assigned to the various departments for research laboratories and offices.

Washington University Clinics is one of the ten largest outpatient clinics in America, with a total patient visit of 140,000 in 1957. Patients are admitted for care without regard to race, creed, color or ability to pay. In 1957, about 7.5 per cent of all services were free and no patient paid the full cost of service given. The majority of patients come from St. Louis and St. Louis County; the remainder from homes in outstate Missouri and surrounding states, chiefly Illinois. The clinics provide an essential part of the training of medical students. The coordinated outpatient teaching program for fourth year medical students developed at Washington University has become the model for development of similar programs in other medical schools in the United States and abroad.

Groundbreaking for a new student dormitory at Washington University School of Medicine was held Friday, Dec. 5. The structure will be called "The Spencer T. Olin Residence Hall." Total estimated construction cost of the ten-story structure is $2,252,785. The dormitory will be located on the south side of Scott Avenue, east of the School of Medicine. Anticipated completion date is September 1960. A gift of $16,500 from the Danforth Foundation will be used for the construction and furnishing of a non-denominational chapel on the first floor of the dormitory. The chapel will be dedicated to the memory of the late William H. Danforth, who gave the funds for the construction of the chapels in Barnes and St. Louis Children's Hospital. From the estate of Mary G. Reber, St. Louis $50,000 will be used for the construction and to furnish and maintain a non-medical Reber Library Lounge on the first floor of the residence. On the second floor, which will house women students, the Dr. Adelheid C. Bedal Lounge will be constructed with a $20,000 fund established by William S. Bedal, St. Louis, in memory of his mother. Dr. Bedal was the first woman to receive her medical degree from Washington University School of Medicine. More than $363,470 has been contributed to the dormitory fund by Medical School alumni, faculty and other donors. The alumni campaign began eight years ago, under the direction of Dr. Samuel B. Grant, St. Louis, when the need for a medical dormitory became evident. The present residence at 4949 Forest Park Boulevard has accommodations for only 50 students. The new dormitory will accommodate 295. A gift from Spencer Olin of 12,000 shares of Olin Mathieson stock and a federal loan of $1,400,000 from the Community Facilities Administration, a division of the Housing and Home Finance Agency, will provide the balance of building funds.

A typical floor will include 15 single bedrooms, each with lavatory; two double bedrooms, also with lavatory and two other two-bedroom suites, each with private bath and adjacent sitting room. According to the architects, the building is arranged much like a modern hotel. A terrace in the front leads to the entry vestibule where a counter, switchboard, mail room, letter boxes and large lounge are located. At the rear of the building is a terrace and garden court area. A two-story gymnasium is located on the first and ground floors and a music room, two elevators, meeting room and manager's suite will be located on the first floor. In addition to the gymnasium, the ground floor will contain a snack bar and dining room, several music rooms, locker and shower facilities, a laundry, two fraternity rooms and a mechanical room. The building will have a penthouse floor, with a social room ringed in floor to ceiling glass, a sundeck and shuffleboard courts. Aluminum canopies, running from wall to wall, will shield windows of each floor on the south elevation from the sun. Both the front and the back of the building will be faced with colored panels and glass in alternating bands. Sash will be all aluminum. The east and west elevations will be solid masses of brick. Many first floor exterior surfaces will be finished in white cut stone.

UNIVERSITY OF MISSOURI

Trips and Talks

Dr. Roscoe L. Pullen, Dean of the School of Medicine, spoke to the members of the St. Louis County Medical Society at the Health Center Auditorium of St. Louis County Hospital, Clayton, on November 12. Dr. Pullen spoke on the subject of "Missouri University Medical School—Its Teaching Program."

Dr. M. D. Overholser, professor and chairman of the Department of Anatomy, attended the meeting of the Missouri Funeral Directors and Embalmers Association at Jefferson City on November 12. Dr. Overholser spoke to the Association on "Procurement of Unclaimed and Bequeathed Bodies for Medical and Dental Education."

Dr. Kenneth L. Fitch, assistant professor of anatomy, organized and placed a display of anatomical books of historical interest on the first floor lobby of the General Library from November 17 to 28. Included were a second edition of Vesalius' *Fabricus* which was given to the University of Missouri by Sir William Osler and a 1645 Dutch edition of Harvey's *Exercitato de motu cordis . . .* , one of seventeen in existence.

Dr. T. D. Luckey, professor and chairman of the Department of Biochemistry, gave a talk to two high school groups and to the Mexico Kiwanis Club on November 4, on the subject of "Science in Your Life." On November 14 and 15, Dr. Luckey, Dr. O. J. Koeppe, associate professor, and Dr. A. A. White, assistant professor, along with graduate students Pat Neville and Delores Sheppard, attended the West Central Biochemical Conference held at the University of Kansas, Lawrence, Kansas. Dr. Luckey presented a paper entitled "Development of a Syntype Diet for Lambs" and Dr. Koppe presented "Coenzyme Requirement for Acyl-Enzyme formation in the Glyceraldehyde-3-Phosphate Dehydrogenase Reaction." Pat Neville presented "Cricket Nutrition: Unidentified Growth Factor."

Dr. C. Thorpe Ray, professor and chairman of the Department of Medicine, attended and participated in the 28th Annual Fall Conference of the Oklahoma City Clinical Society in Oklahoma City, Oklahoma, October 27-29. Dr. Ray presented a general assembly lecture on "Management of Congestive Heart Failure" and participated in a clinical pathologic conference. Dr. Ray gave two specialty lectures, one entitled "Myocarditis" and the other "Diuretic Therapy." He also participated in medical grand rounds at the University of Okla-

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1. Alexander, L.: Chemotherapy of depression—Use of meprobamate combined with benactyzine (2-diethylaminoethyl benzilate) hydrochloride. J.A.M.A. **166**:1019, March 1, 1958. 2. Current personal communications; in the files of Wallace Laboratories.

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homa School of Medicine and University Hospitals. On November 6-8, Dr. Ray visited the Chief of Medicine at the Kansas City General Hospital in Kansas City.

Dr. Frank B. Engley, Jr., professor and chairman of the Department of Microbiology, attended the national meeting for Professional Public Health Workers sponsored by the American Public Health Association on October 28 to 30 in St. Louis. Dr. Engley presented a paper at the meeting entitled "The Persistence and Resistance of Staphylococcus." On November 7, Dr. Engley, as vice chairman of the Planning Committee, attended a meeting in St. Louis with the national committee to plan the 1959 Society of American Bacteriologists' meeting to be held in St. Louis on May 10-14, 1959.

Dr. David G. Hall, assistant professor of obstetrics and gynecology, attended the meeting of the Franklin County Medical Society held in Washington on November 11 where he presented a lecture on "Indications for Cesarean Section."

Dr. Joseph E. Flynn, professor and chairman of the Department of Pathology, and Dr. Vincent P. Perna, assistant professor of pathology, attended the meeting of the Missouri Society of Medical Technologists held on October 18 and 19 in Springfield, Missouri, and participated in a panel discussion of "Relationship Between Physician and Medical Technologist." On November 1-3, Dr. Flynn attended the meeting of the College of American Pathology held in Chicago and Dr. Perna also attended the meeting on October 30 to November 1. On November 13, Dr. Flynn, Dr. Ray, professor and chairman of the Department of Medicine, and Dr. Hugh E. Stephenson, Jr., professor and chairman of the Department of Surgery, presented a Clinical Pathological Conference in Moberly to the Chariton-Macon-Monroe-Randolph County Medical Society.

Dr. Robert L. Jackson, professor and chairman of the Department of Pediatrics, has recently been appointed chairman of the Committee on Infant Nutrition by the Food and Nutrition Board of the National Research Council. This committee is charged with the responsibility of accumulating and interpreting scientific data available, defining the unsolved problems of infant nutrition, pointing out areas for future research, and advising the National Research Council on revision of Recommended Dietary Allowances. On October 16, Dr. Jackson attended a meeting of the Council on Foods and Nutrition of the American Medical Association held in Madison, Wisconsin, and a symposium on "Factors Involved in Formation and Diseases of the Bone." On October 19, Dr. Jackson attended the meeting of the Missouri Academy of General Practice in St. Louis and presented a lecture on "Current Practices in Infant Feeding." Dr. Jackson attended the board meeting of the National Research Council, Food and Nutrition Board held in Washington, D. C., on October 31. The subcommittee on Infant Nutrition also held a meeting to outline plans for future work of the committee.

On November 11, Dr. Jackson, Dr. Clement E. Brooke, assistant professor, and Dr. Constantine S. Anast, assistant professor, attended the meeting of the Kansas City Southwest Pediatrics Society in Kansas City and presented the following talks: Dr. Jackson, "Protein Requirements of Infants"; Dr. Brooks, "Immunological Response of Young"; and Dr. Anast, "Neonatal Nephrosis." On November 14, Dr. Jackson participated in the afternoon session of the annual meeting of the Missouri Dietetic Association and spoke on "Infant and Children's Feeding."

Dr. W. R. Hepner, Jr., professor of pediatrics, attended the annual research meeting of the Central Society for Clinical Research held in Chicago on October 31 to November 1.

Dr. Clement E. Brooke, assistant professor, attended the meeting of the Grand River Medical Society held in Chillicothe on October 9 where he spoke on "Antibiotic Therapy." On October 28, Dr. Brooke attended a lecture on "Growth and Maturation of Adolescents" and a panel on "Causative Factors in Delinquency" sponsored by the School of Social Work and the Missouri Association for Social Welfare held in Columbia.

Dr. G. S. Lodwick, professor and chairman of the Department of Radiology, and Dr. Robert Jamison and Dr. Peter Torbey, assistant instructors and residents in radiology, attended the Carman Lecture sponsored by the Greater St. Louis Society of Radiologists held on October 21 in St. Louis. On October 23-26, Dr. Lodwick attended a conference sponsored by the American Assembly of Columbia University held at the Student Union on the Development of Atomic Power in the United States and the World Today. Dr. Lodwick served as rapporteur, summarizing the main points of each conference. On November 3, Dr. Lodwick spoke to the students and staff of the Agricultural Chemistry Department of the University of Missouri on the "Effect of Radiation on Experimental Animals and the Mechanisms of Death." Dr. Lodwick attended the American Cancer Society meeting held in Columbia on November 5 and gave a talk on "Recent Trends in Cancer Treatment and Research."

Dr. Hugh E. Stephenson, Jr., professor and chairman of the Department of Surgery, Dr. Kenneth K. Keown, professor of anesthesiology, and Dr. Jack Martt, assistant professor of medicine, spoke in Joplin on November 11, on "The Selection and Correction of Heart Lesions Utilizing Open Cardiotomy and Cardioplegia."

Dr. William Dwyer and Dr. Robert Paulette, instructors and fourth year residents in surgery, and Dr. Joseph Ankenbrandt, assistant instructor and second year resident, presented a series of papers on "Trauma of the Chest, Abdomen, and Pelvis" at the meeting of the Central Missouri

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[†] Lhotka, F. M.: Illinois M. J. 112:259 (Dec.) 1957. Fabricant, N. D.: E. E. N. T. Monthly 37:460 (July) 1958. Farmer, D. F.: Clin. Med. 5:1183 (Sept.) 1958.

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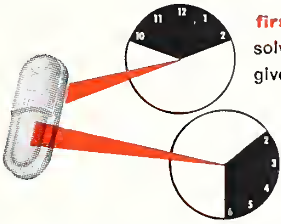

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Chapter of American College of Surgeons on November 13 in Columbia.

On November 12, Dr. Keown attended the meeting of the Kansas City Society of Anesthesiologists in Kansas City, and spoke to the group on the topic of "I M Pentothal."

Dr. Philip Hitchcock, assistant professor of anesthesiology, attended the meeting of the Southern Medical Association in New Orleans on November 3-6, and made a presentation on the subject of "Lidocaine in Cardiac Arrthymias."

Gifts and Grants

A grant has been awarded the University of Missouri School of Medicine by the United States Public Health Service in the amount of $22,225 for the purchase of "Movable Scientific Equipment for the Clinical Research Wing of the Medical Center."

Dr. T. D. Luckey, professor of biochemistry, has been awarded a grant in the amount of $5,854 by the United States Public Health Service for support of research on "Isolation of a Growth Factor for Invertebrates."

Dr. Owen J. Koeppe, associate professor of biochemistry, has been awarded a grant by the U.S.P.H.S. in the amount of $5,175 for the support of research on "The Biosynthesis of Peptide Bonds—Carnosine."

Dr. A. A. White, assistant professor of Biochemistry, has been awarded a grant by the American Medical Association in the amount of $400 for the study of the "Serum Mucoprotein Induced by Toxic Doses of Vitamin D and Parathryoid Hormones."

A grant for the purpose of "Undergraduate Teaching of Heart Disease" has been awarded Dr. C. Thorpe Ray, professor of medicine, in the amount of $25,000.

Dr. H. S. Goldberg, associate professor of microbiology, has been awarded a renewal of the grant from the U.S.P.H.S. in the amount of $15,972 for the purpose of research on "Antibiotic Residues in Horticultural Crops." Dr. Goldberg is co-director of the project with Dr. Robert N. Coodman of the Horticulture Department in the College of Agriculture.

A grant renewal has been awarded to Dr. Robert L. Jackson, professor of pediatrics, by the U.S.P.H.S. in the amount of $15,000 for the teaching and training of undergraduate and postgraduate students in the clinical management of diabetic patients. Dr. Jackson has also awarded a grant by the General Foods Corporation in the amount of $5,400 for research on "Tolerance of Infants to New Frozen Concentrated Strained Baby Foods." Also, Dr. Jackson and Dr. W. R. Hepner, Jr., professor of pediatrics, have been awarded a grant by the Evaporated Milk Association in the amount of $30,000 for research on "Infantile Body Composition." Dr. Hepner has been awarded a grant by the U.S.P.H.S. in the amount of $1,108 for research on "Unsaturated Fat, Placental Senility and the Fetus." He has also received a renewal of his grant from the National Council to Combat Blindness in the amount of $1,000 for research on "Effects of Maternal Hyperoxemia on the Intrauterine Development of the Eye."

Dr. B. A. Westfall, professor of physiology and pharmacology, and Dr. W. S. Platner, professor of physiology, have been awarded a renewal of the grant from the U.S.P.H.S. in the amount of $8,165 for continued studies on bound and free cardiac glycogen.

Dr. A. W. Merrick, assistant professor of physiology, has been awarded a grant by the U.S.P.H.S. in the amount of $6,871 for research on "Glycogen Fractions of Cardiac and Nervous Tissues."

Dr. J. E. Randall, associate professor of physiology and biophysics, has been awarded a grant by the U.S.P.H.S. in the amount of $10,412 for "Stochastic Properties of a Vascular System."

Dr. Marvin Zatman, assistant professor of physiology, has been awarded a grant by the University Research Council for the "Purchase of a Water Bath and Equipment to be used in the Study of Renal Physiology."

Dr. Henry McQuade, associate professor of U.S.P.H.S. in the amount of $10,634 for research radiobiology, has been awarded a grant by the on "Radiation Effects of Thymidine—6—Tritium."

SAINT LOUIS UNIVERSITY

Grants

The School of Medicine has been awarded a grant of a quarter of a million dollars by the Children's Bureau of the Department of Health, Education and Welfare of the United States Public Health Service for the establishment of a mental retardation program at Cardinal Glennon Memorial Hospital for Children. The grant award is for a five year period with allotments of $50,000 annually.

The program will be under the direction of Dr. James P. King, director of the department of pediatrics and chief-of-staff, Cardinal Glennon Memorial Hospital, and will be closely correlated with the Bureau of Maternal and Child Health of the Missouri Division of Health.

The award money will be used to establish salaries, equipment and travel expenses for personnel for the diagnosis, program planning and treatment of mentally retarded children. Personnel for the program will include the appointment of a full-time pediatrician who will serve as director, an assistant pediatrician, a psychologist, social worker and public health nurse. The faculty of the School of Medicine and the Hospital staff will be available as consultants in cases in which medical specialists are required.

The major part of the program will be an out-patient facility, and by special scheduling will be coordinated with the pediatric medical clinic and the rehabilitation clinics of the out-patient department located at the hospital. The present in-patient facilities at Cardinal Glennon Hospital will

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The function of the new program will be statewide. The personnel of the program will develop institutes, workshops and other educational programs throughout the state in conjunction with the Missouri Division of Health.

Dr. Elizah Adams, professor of pharmacology and director of the department has received a grant award of $49,488 from the Health Research Facilities Branch of the United States Public Health Service. The award will be used to rebuild and refurnish the pharmacology department.

The department of microbiology directed by Dr. R. Walter Schlesinger has been awarded a grant of $28,850 by the National Science Foundation for the purchase of laboratory research equipment. Dr. Schlesinger and his research associates will use the equipment in investigations on biochemical mechanisms of growth and multiplication of viruses and bacteria.

Lectures

Medical specialists drawn from the many departments of the School of Medicine faculty combined talent in the presentation of an Inter-Departmental Program held at Desloge Hospital in November. The program marked the tenth in a series of sessions planned by the school's departments to observe the Silver Jubilee of Desloge Hospital. The all day final program was divided into two half-day panels. The morning panel moderated by Dr. C. Rollins Hanlon, director of the department of surgery, was a discussion on "The Practitioner's Office as a Cancer Detection Center." The afternoon panel, moderated by Dr. William F. Knight, associate professor of internal medicine, was a discussion on "The Management of Home Emergencies."

Dr. Rene Wegria, professor of internal medicine and director of the department, spoke on "The Role of the Medical School and the University Hospital in the University and in the Community" before members of the St. Louis Medical Society October 29. Dr. Wegria, who joined the School of Medicine faculty in late summer, was introduced to medical society membership at a reception held that evening.

Revised Curriculum

A four-year student program in radiobiology, designed to keep pace with development in the field of nuclear fission and associated hazards to the nation's health, has been inaugurated in the School of Medicine. The incorporation of radiobiology in the standard curriculum required an integration of faculty effort beyond that of traditional departmental lines. Therefore, a coordinated faculty committee of all medical departments initiated the new curriculum under the chairmanship of Dr. Edward A. Doisy, Nobel Prize Winner and director of the Edward A. Doisy Department of Biochemistry. Emphasis within certain courses has permitted the introduction of radiobiology without increasing the hours of class room study. The program was designed to emphasize newer aspects of medical interest by directing the attention of the medical student to the basic biologic principles in the field of genetics, growth and development, cellular metabolism and biologic differentiation. The new program affects all four years of the medical school training with particular emphasis upon the first three years in medical school in intensified laboratory study and lectures. Some of the areas for review will be the effect of radiation in biologic systems and the application of radioisotopes in the study of normal metabolic processes and diseased conditions. The maintenance of the curricular program is supported largely by a grant of $62,000 from the Rockefeller Foundation. A grant of $25,000 from the Atomic Energy Commission provided the equipment initially necessary for the new program.

Honor

Dr. Helmuth H. Kramolowsky, associate professor of clinical urology, received an alumni merit award during the University's Founders' Day celebration November 16-17. The alumni award was established in 1955 to give recognition before the community and the nation, to distinguished graduates who are exemplifying to an eminent degree in their daily lives the Credo of Saint Louis University. Dr. Kramalowsky is urologist for the St. Mary's Group of hospitals. In addition to long service with the St. Mary's Group, he has served on the staffs of St. Anthony's Hospital, St. Louis Mullanphy and DePaul Hospital.

Missouri Medicine in Review

Leo H. Pollock, M.D.

FORTY YEARS AGO

The Buchanan County Medical Society has appointed a banquet committee to prepare a suitable welcome to the members who have served in the war when they return home.

Dr. Frank X. Hartigan was wounded when the Germans bombed the hospital where he was stationed. He has recovered and according to latest advices will enter Germany with the American Army of Occupation.

Dr. J. R. Clemens, who formerly practiced in St. Louis, but has been dean of the John A. Creighton Medical College, Omaha, Neb., for several years and later major in the Medical Corps of the Army, has

(Continued on page 89)

Missouri Medicine in Review

(Continued from page 80)

returned to St. Louis and will resume his practice in that city.

Dr. A. C. Pettijohn of Brookfield, formerly superintendent of State Hospital No. 2 at St. Joseph, and later superintendent of the Eastern Oklahoma Hospital for the Insane at Vinita, Oklahoma, is now resident physician at the Dr. C. R. Woodson Sanitarium, St. Joseph.

An open air school, combining the features of a boarding school and day school, for girls of subnormal physique and consequent deficient mental development, has been established by the St. Louis Tuberculosis Society and the public school authorities at St. Louis. It is said to be the first institution of its kind and the experiment will be tested for a period of six months. The school opened with fifteen children in attendance.

Lieut. Guy A. Tull of Kansas City, who joined the Medical Reserve Corps soon after the declaration of war with German, is the fifth member of the Association who has died in the service. Dr. Tull was on duty with the Three Hundred and Fifty-third Infantry, Camp Funston, Kansas, when he became ill and was furloughed to his home, where he died from chronic interstitial nephritis. He was a member of the Jackson County Medical Society.

Capt. George E. Farr, Shelbyville, Medical Corps, U. S. Army, on duty on the Mexican border, died in the base hospital at Brownsville, Texas, October 30, from pneumonia, following influenza, aged 39. He is the sixth physician from Missouri who died while in service.

Lieut. W. A. Fair of Pleasant Hill is the seventh member whose life has been sacrificed since the war began. He was killed October 6 in the Argonne Forest Battle while attempting to aid a wounded brother officer lying in an exposed position under machine gun fire.

We learn that the following Missouri physicians who were held prisoners by Germany have been released and probably now are in France or on their way home: Capt. Arthur H. Sewing, St. Louis; Capt. John F. Hardesty, St. Louis; Lieut. H. L. Rothman, St. Louis; Lieut. L. M. Edens, Cabool, and Lieut. H. A. Goodrich, Webster Groves.

The following members have returned to their homes: John A. Best, High Hill; Capt. G. B. Benson, St. Louis; L. J. Dandurant, St. Joseph; Fayette C. Ewing, St. Louis; C. M. Grace, Chillicothe; A. H. Hamel, St. Louis; G. W. Hawkins, Salisbury; P. I. Leonard, St. Joseph; E. J. Mairs, Laredo; Robert E. Schlueter, St. Louis; B. B. Simmons, St. Joseph; F. H. Spencer, St. Joseph; G. R. Stevenson, St. Joseph.

TWENTY-FIVE YEARS AGO

New hope is offered in the recent report by Dr. E. A. Graham and Dr. J. J. Singer, St. Louis. In a man of 48 suffering from a squamous cell carcinoma of the bronchus, Dr. Graham was able to removed in a one stage operation the entire left lung and its adjacent lymph nodes. The eradication of tumor tissue was apparently complete and the patient made a most satisfactory recovery. It is believed that this is the first time an entire lung has been successfully removed for a carcinoma.

On November 28 the Woman's Auxiliary to the Lafayette County Medical Society entertained the Lafayette and Johnson County medical societies and the Johnson County Auxiliary at a buffet supper in the home of Dr. and Mrs. E. L. Johnston, Concordia. Honor guests were the president, Mrs. Hudson Talbott, and Dr. Talbott, St. Louis; president-elect, Mrs. W. H. Goodson, and Dr. Goodson, Liberty; Dr. and Mrs. D. S. Long and Dr. and Mrs. M. P. Overholser, Harrisonville.

At the annual meeting of the Buchanan County Medical Society, called to order by the president Dr. W. H. Minton, in the Missouri Methodist Hospital at 8 p.m., December 6, election of officers for 1934 resulted as follows: President, Dr. Willard C. Proud; vice president, Dr. Paul Forgave; secretary, Dr. Emmett F. Cook; treasurer, Dr. John M. Bell.

The Cape Girardeau County Medical Society met in the Chamber of Commerce rooms at Cape Girardeau at 8:00 p.m., November 15, with Dr. M. H. Shelby, Cape Girardeau, president, in the chair.

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Glyceryl Trinitrate (Nitroglycerin) 1/150 gr.
Pentaerythritol Tetranitrate .. 15 mg.
Thiamin Mononitrate . . . . . . 5 mg.

Society elected officers for the ensuing year as follows: President, Dr. J. O. Cooper, Linn; vice president, Dr. John H. W. Baehr, Hermann; secretary, Dr. O. H. Jones, Vienna.

The regular meeting of the Greene County Medical Society was held December 8 in the Springfield Public Library. Dr. J. H. Fulbright, Springfield, president, presided. Attendance was thirty-two. The following officers were elected to serve for 1934: President, Dr. Guy D. Callaway, Springfield; vice president, Dr. Wallis Smith, Springfield; secretary, Dr. John W. Williams, Jr., Springfield; treasurer, Dr. W. E. Handley (reelected), Springfield.

The Marion-Ralls County Medical Society met December 1 and elected the following officers for the ensuing year: President, Dr. F. E. Sultzman, Hannibal; vice president, Dr. W. D. Pipkin, Monroe City; secretary-treasurer, Dr. W. F. Lauten, Hannibal.

The Pettis County Medical Society met on December 4 and elected officers for the ensuing year as follows: President, Dr. Cord Bohling, Sedalia; vice president, Dr. W. T. Bishop, Sedalia; secretary, Dr. J. B. Carlisle, Sedalia; treasurer, Dr. A. E. Monroe, Sedalia.

TEN YEARS AGO

Father Alphonse M. Schwitalla, S.J., Dean of the St. Louis University School of Medicine, was given a medal at the American Medical Association Interim Session in recognition of his distinguished service in maintaining the ideals of medicine and as an educator in the field of medical education. This is the first time in the history of the American Medical Association that such an award has been made. His many friends will regret that ill health has caused him to resign as dean of the St. Louis University School of Medicine, effective December 11, 1948. Father Schwitalla has been dean for the last twenty-one years.

Vilray P. Blair, M.D., St. Louis, was guest of honor at a meeting of the American Society of Plastic and Reconstructive Surgery at White Sulphur Springs, Va., on November 20, and was presented a certificate.

Emma Arabella Thompson, M.D., Breckenridge, was honored by her community on November 5 for her many years of service as a physician.

J. Earl Smith, M.D., St. Louis has been appointed St. Louis City Health Commissioner to fill the vacancy created by the death of Joseph F. Bredeck, M.D.

C. Edgar Virden, M.D., Kansas City, was elected president of the Missouri Division of the American Cancer Society at a meeting recently. Edwin C. Ernst, M.D., St. Louis, was elected vice president.

A joint dinner meeting of the societies of the Tenth Councilor District was held at Caruthersville, on November 18. Despite heavy rain, thirty-eight physicians were in attendance to enjoy a social hour, and to hear M. Pinson Neal, M.D., Columbia, speak on "Diagnoses Commonly Missed in General Practice." A number of physicians drove more than a hundred miles in definitely inclement weather to partake of the values of this meeting.

An afternoon and evening meeting of the Second Councilor District was held at the Merchant's Hotel, Moberly, on November 11. The afternoon program consisted of three scientific talks.

Sixty-five physicians and guests attended an afternoon and evening meeting of the Fifth Councilor District at the Governor Hotel, Jefferson City, on December 9.

BOOKS RECEIVED

Correlative Neuroanatomy and Functional Neurology, by Joseph G. Chusid, M.D., Attending Neurologist, St. Vincent's Hospital, New York; and Joseph J. McDonald, M.S., M.Sc.D., M.D., Dean of Medical Faculty, American University of Beirut, Beirut, Lebanon; Formerly Professor of Surgery, Columbia University, New York. Ninth Edition. Illustrated by Ralph Sweet. Lange Medical Publications, Los Altos, California. 1958. Price $4.50.

Fat Consumption and Coronary Disease: The Evolutionary Answer to This Problem, by T. L. Cleave, M.R.C.P. (Lond.) Surgeon Captain, Royal Navy; with a foreword by Percy Stocks, M.D., Senior Research Fellow, British Empire Cancer Campaign; Chief Medical Statistician, General Register Office. Philosophical Library, New York. 1958. Price $2.50.

Aids to Ophthalmology, by P. McG. Moffat, M.D., Consultant Ophthalmic Surgeon and Lecturer, Moorfields Eye Hospital, Hammersmith, West London and St. Mark's Hospital Groups; Lecturer Postgraduate Medical School; Recognized teacher of the London University; Senior Ophthalmic Consultant and Adviser; London County Council Central Medical Staff. Eleventh Edition. Bailliere, Tindall and Cox, London. 1957. Price $3.00.

Diabetes as a Way of Life, by T. S. Danowski, M.D., Renziehausen Professor of Research Medicine, University of Pittsburgh School of Medicine; Senior Staff Physician at Presbyterian-Woman's, Children's, Elizabeth Steel Magee, and Shadyside Hospitals of Pittsburgh; Consultant in Metabolism, Oakland Veteran's Administration Hospital, Pittsburgh. Coward-McCann, Inc., New York. 1958. Price $3.50.

Erythroblastosis Fetalis Including Exchange Transfusion Technic, by Fred H. Allen, Jr., M.D., Clinical Associate in Pediatrics, Harvard Medical School; Associate Hematologist, The Children's Hospital; Associate Director, Blood Grouping Laboratory of Boston; and Louis K. Diamond, M.D., Associate Professor of Pediatrics, Harvard Medical School; Hematologist, The Children's Hospital; Director, Blood Grouping Laboratory of Boston. Little, Brown and Company, Boston. First Edition. 1957, 1958. Price $4.00.

Curiosa et Trivia

The highest mortality from tetanus is among infants less than 1 month old, and in the South. Most likely entrance point of infection—the unhealed umbilical cord.

Nebraska State Orthopedic Hospital School of Nursing graduate, Lorene Barnes, is also a licensed master plumber, and has about twenty men on her payroll.

Home remedy fans, take note: treating a cold with bourbon does have some virtue! Aside from raising the temperature of the nasal mucous membranes, it adds some appeal to the indicated bed rest.

Cardiovascular diseases cause twice as many deaths as cancer, accidents, pneumonia, tuberculosis and diabetes.

Swank hostelry, Bellevue-Stratford Hotel in Philadelphia, stands on the old location of the John Wyeth & Brother pharmacy. The now huge Wyeth Laboratories have somewhat outgrown their original location.

Nearly half of the two thousand war-blinded veterans of World War II now hold regular jobs.

Capsule Clinics

- Dysmenorrhea was controlled in 93 per cent of women given relaxin orally. Abramson & Reid, Obst. & Gynec. **12**:123, 1958.

- Although the author does not solve the riddle of the labile T wave, he does focus attention on the "juvenile pattern." The clinician should be aware of overt and latent expressions of the phenomenon in order to avoid unnecessary implication of serious organic heart disease. On the other hand, the pendulum should not swing so far that all minor or fluctuating T wave changes are considered "functional." In general, the "juvenile pattern" is normalized by reassurance, sedation or vagal block. It is exaggerated by hyperventilation. Wasserburger, R. H., Am. J. Cardiol. **2**:179, 1958.

- Relaxin was without value in softening the cervix and failed to facilitate cervical dilatation in the course of normal labor. Dill and Chantry, J.A.M.A. **167**:1910, 1958.

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WASHINGTON

More money is being requested of Congress to expand the United States' leadership in medical research aboard. Some of the proposals include an international medical year, more U. S. grants to foreign medical researchers, and an international medical research foundation.

Much of the interest in this field is being credited to the publicity received by Senator Hubert H. Humphrey's long meeting with Russia's Premier Khrushchev.

The Minnesota lawmaker reported they talked at great length about medical research and exchange of professors and students. The senator said Khrushchev gave "enthusiastic approval" to his proposal of an international medical research program.

One of Alaska's new senators, Dr. Ernest Gruening, is expected to be a strong backer of Humphrey's proposal. The physician, one of the first in the senate in nearly a generation, has long been interested in public affairs. A Democrat, he served as governor of Alaska from 1939 until 1952.

Measures to provide varying degrees of medical and hospital care for persons receiving Social Security payments again promise to draw a lot of attention during this 86th session of Congress.

It is expected that the Forand bill held up last year by the House of Representatives again will be the main bone of contention. It would have provided free hospitalization and surgical care for those over 65 and receiving monthly social security payments.

Millions of Americans just last month started paying higher taxes for the increased benefits (a 7 per cent monthly hike) voted last August by Congress. The benefits, of course, go primarily to those on the retirement rolls—about 13 million people.

The recent report by a special advisory council that the Social Security system is financially sound was greeted with mixed emotions. One labor chieftain said the report should put an end to the story that the fund was not on sound financial grounds.

Opponents of further and all changes in the program maintain that the original concept of the system has been aborted. It was meant just to provide a sound floor under the income and savings of retired people, they say—not all things to all men.

Political observers already are predicting the real pressure for passing the Forand bill, or some version of it, will come next year—a presidential election year.

The Washington office of the A.M.A. has predicted that Congress undoubtedly will be asked to renew the doctor draft act now due to expire in June. The Defense Department expects it will need the act to produce the physicians it will need next year.

Another measure expected back by the A.M.A. for another try is the Keogh pension bill. It would grant the self-employed a tax status similar to that of corporation employees by allowing them to defer income tax payments on earnings placed in retirement plans. The bill passed the House last session only to die in the Senate.

The A.M.A. recently added two new members to its Washington staff. Edwin B. Patterson, former counsel of House Veterans Affairs Committee since 1948, is the new manager. He replaces Dr. William J. Kennard who resigned in December. Dr. Kennard had been acting director since last April.

The second new member is Cecil Dickson who will represent the A.M.A. to the lawmakers. He was assistant to Eric Johnston, head of Motion Picture Association of America, and filled a similar capacity in Washington.

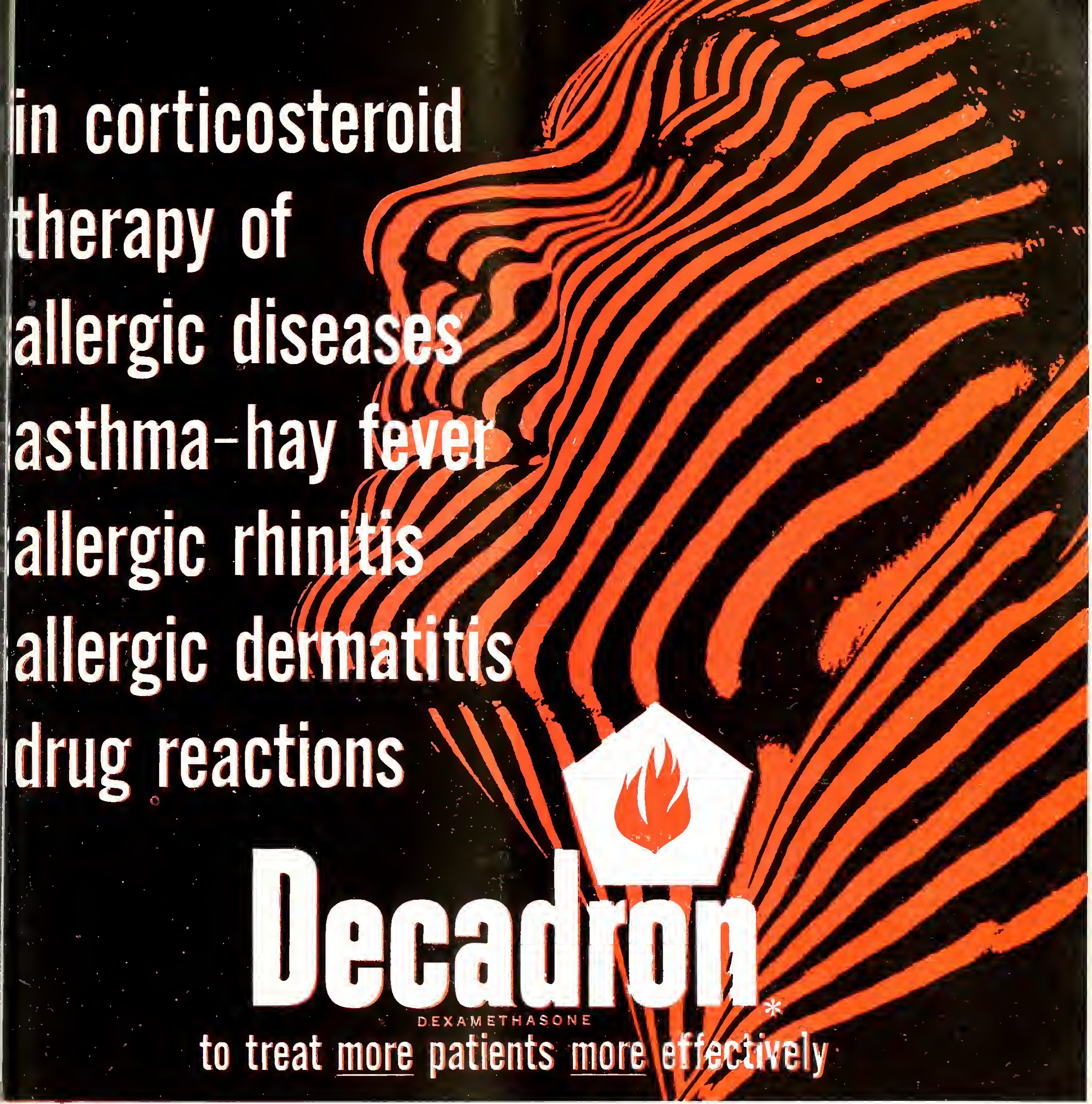
Next year's Medicare contract will be renegotiated by mail, the Medicare office of the Defense Department has announced. As in the past, extensions will be for one year. Up until now, contractors for physicians in each state have worked it out at the negotiation table with Medicare officials.

It now appears that the 72 million dollars appropriated last year by Congress for the current fiscal year will be exhausted before June 30. If so, the Defense Department probably will go before Congress and ask for a deficiency appropriation.

This could open the door to discussion of the restrictions placed on the program by Congress that went into effect last fall. An advisory committee also has proposed that a modified dental care program be included.

Surgeon General Leroy Burney, head of the Public Health Service, has called for a revival of the polio vaccination campaign, particularly pointed toward children under 5 years of age.

At a Washington meeting, 30 medical leaders were told there was more paralytic polio in the nation than in 1957, although less than in any other year in the last 15.



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Across Missouri

The Missouri Legislature is off to an unusually fast start under the impetus of Gov. James T. Blair's program outlined in his opening message.

Higher taxes were called for in his recommendations that seek increases in all welfare operations as well as most other fields. Some of the increases in the welfare program that it is estimated would cost 8 million dollars more biennially would:

Raise old-age pensions from the present maximum of $60 to $65 a month.

Increase aid to dependent children, from $30 each for mother and first child and $21 for each succeeding child, to $30 for each mother and $30 for first and each additional child.

Increase the assistance figure for blind and totally and permanently disabled from $60 to $65 a month.

Set the maximum monthly payment for those on general relief at $65 a month, there being no set figure now.

Bring the state under the federal Vendor program for the first time by providing hospital and nursing home care for the aged. By appropriating 1 million dollars the state would receive $1,146,840 in federal money. Monthly aid for the bedfast in nursing homes would be boosted to $100 a month.

Governor Blair recommended passage of the joint licensure measure backed by the physicians and osteopaths in his opening address. This bill calls for a single board, composed of 5 M.D.s and 2 D.O.s. It has been approved by MSMA and the Missouri Osteopathic Association.

The leaders in the House of Representatives took steps to speed up the legislative process. The number of standing committees was reduced from 63 to 47. With the larger number of committees, many members found that they could not attend hearings because of conflict in meeting dates. This often slowed down considerations of bills because frequently hearings could not be held due to the lack of a quorum.

A heavy number of bills were introduced during the early part of the session, including one to repeal the King-Thompson law which prohibits strikes in public utilities. Others introduced in the House would:

Allow old-age pensioners to live with relatives regardless of the latter's income.

Revoke the driver's license of anyone under 18 years old for just one nonmoving violation and the violator could not get a new one until he reaches 18.

Governor Blair devoted quite a bit of attention in his opening remarks to traffic safety. He asked that the "point system" which would automatically remove a driver's license after so many demerits be enacted. In this field, he suggested stiffer penalties for drunken driving with imprisonment on the third conviction and a chemical test for drunken driving.

Most of these ideas also were recommended by the interim legislative committee on traffic safety.

He also backed the passage of a fire safety act for Missouri. The recent tragic school fire in Chicago is being used as an example of the need for such a law.

Forty million dollars in new taxes will be needed, the governor told the legislators. His total budget ran over the 1-billion-dollar mark for the next two years. This is the largest budget ever outlined.

He proposed three major sources for the new revenue. He suggested that 16 million dollars be raised by the imposition of a use tax on all goods purchased outside the state.

Seven million more could be obtained by increased beer and liquor taxes and 10 million from an increase in the cigarette tax, he added.

As outlined by Governor Blair, the 2-year budget totals $1,157,600,000. Of this $419,200,000 would come from the general revenue fund; $323,200,000 from other state funds and $415,200,000 from federal moneys.

Governor Blair added that the recommended increases primarily are a result of the expense of new or expanded programs already authorized by the General Assembly. Some of the major increases recommended:

The public school foundation program, 5 million.

Higher education, including agricultural research stations and the expansion of the university medical center to its full capacity, $3,300,000.

Health services, 1 million.

He also commented that at present the state is supporting the health program at only about 35 per cent of what the statutes required. The increases would provide for full inspection of milk and water supplies and public lodgings.

Other increases recommended by him, but not in specific dollar amounts, included expansion of the probation and parole system; improvements of the staff-patient ratio in mental hospitals and staffing of new facilities; expansion of the division of resources and development; major salary increases for the highway patrol and the division of liquor control, and cost of living increases for other state employees.

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Missouri Academy of General Practice

John F. Pearl, M.D.

The holiday season has again been here and gone. We sincerely hope yours was as happy, gay and bountiful as ours. Even with Christmas staring them in the face the Education Committee was hard at work at the Missouri Hotel in Jefferson City December 21. Dr Wyeth Hamlin, our most able Education Chairman, conducted a successful meeting. Present were committee members Doyle McCraw, M.D., Bolivar; S. O. Schroeder, M.D., Liberty; Wilbur Mullarky, M.D., St. Louis. In addition, Dr. P. V. Siegel, our president, and Kenneth Keown, M.D., Columbia, Chairman of the Postgraduate Committee of the University of Missouri Medical School, sat in on the meeting.

Plans and programs for the 4th Annual Spring Clinical Conference at the University of Missouri Medical Center to be held on Wednesday and Thursday, May 13 and 14, 1959, were discussed. This clinical conference is to be sponsored jointly by the Missouri University Medical School, Missouri Academy of General Practice and the Missouri Heart Association. Tentative plans are to have four outstanding speakers on the two day program from outside the State of Missouri with the Academy sponsoring two of these. Additional speakers from the faculty of the University of Missouri Medical School will round out the two day program. Plans call for between 10 and 12 hours of scientific program which will be submitted to the American Academy's Commission on Education for postgraduate credit for Academy members who plan to attend. More final details of the program, when fully developed, will be mailed to physicians in the state.

The St. Louis Academy installed officers at a meeting on December 6.

The second point on the Committee's agenda was the development of the Scientific Assembly of the Missouri Academy of General Practice, to be held at Hotel Chase in St. Louis on Saturday and Sunday, November 7 and 8, 1959. The Committee decided to follow the same pattern as our most successful 1958 meeting. There will again be four symposia, one Saturday morning, November 7, and Saturday afternoon, the third on Sunday morning, November 8, and the final one on Sunday afternoon. At the close of each symposium a panel discussion with the speakers participating will be held. The four subjects which will comprise the symposia are: Obstetrics, Medicine, Fractures and Hematology. In the symposium on Medicine, it is contemplated having a top-notch speaker to present the latest on "Space Medicine" as a part of that particular session. An outstanding personality is being contracted and invited to give the annual banquet address on Saturday night, November 7. Again it is anticipated that this 1959 Assembly will be bigger and better than ever. We can all thank our hard working Education Committee for providing such excellent programs as a stimulus for increased attendance and enjoyable credit hours.

The St. Louis Academy held its Annual Installation of officers and Dinner Dance Saturday evening December 6 at LeChateau. There were about 200 in attendance. The following officers were installed for 1959: President, Charles A. Molden, M.D.; President-elect, Eugene Hall, M.D.; Vice-President, E. V. Henschel, M.D.; Secretary, V. E. Michael, M.D.; and Treasurer, Eugene H. Edele, M.D.

The Education Committee met in Jefferson City on December 21.

Dr. Preston C. Hall is still on the ball and with the help of his Committee and the Academy members throughout the state has added the following members to our constantly growing Academy since

(Continued on page 128)

Organization

AMERICAN MEDICAL ASSOCIATION

President, Gunnar Gundersen, LaCrosse, Wis.

Annual Session, Atlantic City, June 8-12, 1959.

MISSOURI STATE MEDICAL ASSOCIATION

101st Annual Session, Kansas City

April 5-8, 1959

President, W. F. Francka, Hannibal.
President-Elect, Ralph Perry, Kansas City.
Vice Presidents, James C. Cope, Columbia; M. T. English, Kirksville; W. O. Finney, Chaffee.
Treasurer, R. O. Muether, St. Louis.
Secretary, J. I. Matthews, Jefferson City.
Editor, Charles R. Doyle, St. Louis.
Speaker of the House of Delegates, O. P. Hampton, University City; Vice Speaker, William C. Mixson, Kansas City.
Field Secretary, Ray McIntyre, St. Louis.
Assistant Editor, Helen Penn, St. Louis.
Executive Assistant, Bill Logan, St. Louis.
Executive Secretary, Tom R. O'Brien, 623 Missouri Theatre Bldg., 634 N. Grand Blvd., St. Louis 3.

Delegates to the American Medical Association

Joseph C. Peden, Sr., St. Louis; alternate, Dean Sauer, St. Louis, 1958-1960. F. L. Feierabend, Kansas City; alternate, Rolla B. Wray, Nevada, 1958-1960. Durward G. Hall, Springfield; alternate, Guy N. Magness, University City, 1959-1961. H. E. Petersen, St. Joseph; alternate, J. Loren Washburn, Versailles, 1959-1961.

Standing Committees

Scientific and Postgraduate Work—John A. Growdon, Kansas City, Chairman (1961); James G. Janney, Jr., St. Louis (1961); John I. Matthews, Jefferson City (1960); Hector W. Benoit, Kansas City (1960); M. Pinson Neal, Columbia (1959). **Associate Members**—W. Paul Maddux, Springfield; J. H. Keim, Cape Girardeau; Charles O. Metz, St. Louis; Wyeth Hamlin, Hannibal; William R. Richardson, Union; Robert Smith, Marceline.

Defense—C. E. Hyndman, St. Louis, Chairman (1960); L. P. Forgrave, St. Joseph (1961); Ronald Elkins, Springfield (1961); Roland S. Kieffer, St. Louis (1959); Joseph G. Webster, Kansas City (1959).

Public Policy and Public Relations—R. O. Muether, St. Louis, Chairman; W. D. Chute, Moberly; R. J. Crider, St. Charles; Rolla B. Wray, Nevada; James E. McConchie, Independence; O. B. Crawford, Springfield; H. W. Carrington, Lebanon; J. J. Bredall, Perryville; John R. Dixon, Brookfield; R. R. Lyle, Versailles.

Medical Education and Hospitals—Kenneth Glover, Mount Vernon, Chairman (1959); George J. L. Wulff, Jr., University City (1961); Doyle C. McCraw, Bolivar (1961); Ralph R. Coffey, Kansas City (1960); Harry K. Purcell, St. Louis (1959).

Cancer—Marvin L. Napper, Springfield, Chairman (1961); Joseph L. Fisher, St. Joseph (1960); George A. Carroll, St. Louis (1959); George O. Miles, Kansas City (1959). **Associate Members**—John E. Lamy, Sedalia; Byron E. Watts, Jefferson City; Charles E. Lockhart, Springfield; John J. Modlin, Columbia; A. N. Arneson, St. Louis; E. Kip Robinson, Kansas City.

Medical Economics—A. P. Rowlette, Moberly, Chairman (1961); John R. Forgrave, St. Joseph (1961); A. B. Smith, Kansas City (1960); R. E. Breuer, Newburg (1960); George L. Hawkins, St. Louis (1959). **Associate Members**—Robert D. Duncan, Springfield; G. W. Winn, Boonville; E. D. Imes, Maryville; John T. Crowe, Cape Girardeau.

Mental Health—John J. O'Hearne, Kansas City, Chairman; Robert J. Mueller, St. Louis; H. V. Guhleman, Jr., Jefferson City; James N. Haddock, Webster Groves; D. R. Edwards, Sedalia; A. L. Brown, Springfield; Arnold S. Block, St. Louis; Albert Preston, Jr., Kansas City; John H. Platz, Carrollton.

Maternal Welfare—James E. Keeler, Kansas City, Chairman (1961); Joheph M. Krebs, St. Louis (1961); Joseph L. Johnston, Springfield (1960); William See, Columbia (1959); E. E. Wadlow, St. Joseph (1959); **Associate Members**—P. V. Siegel, Smithton; H. C. Willumson, St. Joseph; A. C. Trueblood, Jr., St. Louis; Irwin T. Craig, Joplin; J. J. Wimp, Kirksville; Forrest C. Long, Savannah; Eugene G. Hamilton, St. Louis; A. B. Sinclair, Kansas City.

Infant and Child Care—Daniel B. Landau, Hannibal, Chairman; H. E. Wachter, St. Joseph; R. J. LaDriere, St. Louis; Guy N. Magness, University City; Leonard L. Davis, Jr., Mexico; James J. Pascoe, Nevada; E. J. Schwartz, Springfield; J. N. Wiles, West Plains; James A. Kinder, Cape Girardeau; Gerald E. Hughes, Kansas City.

Health and Public Instruction—John R. McDaniel, St. Joseph, Chairman (1960); J. Earl Smith, St. Louis (1961); E. A. Belden, Jefferson City (1960); R. R. Grayson, St. Louis (1959); A. W. McAlester, III, Kansas City (1959).

Constitution and By-Laws—W. A. Bloom, Fayette, Chairman (1960); W. L. Allee, Eldon (1961); P. W. Jennings, Canton (1961); H. M. Parker, Kansas City (1959); Kenneth V. Larsen, St. Louis (1959).

Fractures—R. E. Funsch, University City, Chairman (1961); O. P. Hampton, University City (1960); Thomas G. Otto, Cape Girardeau (1960); Paul W. Meyer, Kansas City (1959); Ralph K. Earp, St. Louis (1959). **Associate Members**—William C. Francis, Springfield; B. L. Murphy, Hannibal; Otis E. James, Kansas City; Glenn L. McElroy, Columbia.

Eye Health—T. E. Sanders, St. Louis, Chairman (1961); H. B. Ivy, Springfield (1961); Paul G. Wolff, Cape Girardeau (1960); John McLeod, Kansas City (1959); H. B. Stauffer, Jefferson City (1959). **Associate Members**—Dick H. Underwood, Kansas City; Michael F. Pernoud, St. Louis; D. E. Eggleston, Macon; W. L. Post, Joplin; Robert S. Minton, St. Joseph; W. J. Smith, Hannibal.

Control of Venereal Disease—Edwin M. Powell, Springfield, Chairman (1959); E. M. Cannon, St. Louis (1961); A. W. Neilson, St. Louis (1961); R. J. Murphy, Kansas City (1959); Robert B. Bristow, St. Joseph (1960). **Associate Member**—John E. Byrne, St. Louis.

Industrial Health—H. M. Roebber, Bonne Terre, Chairman (1960); Vencel W. Hollo, St. Louis (1961); William H. Duncan, Kansas City (1961); Douglas A. Ries, Richmond Heights (1960); S. W. Scorse, Joplin (1959). **Associate Member**—James W. Clawson, Springfield.

Diabetes—H. E. Oppenheimer, Clayton, Chairman (1960); J. Bruce Lemmon, Jr., Springfield (1961); H. M. Gilkey, Kansas City (1961); Charles M. Lamke, Columbia (1960); Lucien W. Ide, St. Joseph (1959). **Associate Members**—William H. Olmsted, St. Louis; Robert E. Koch, Clayton; Ralph S. Casford, Kansas City; John H. Walterschied, Hannibal.

Anesthesiology—O. T. Blanke, Joplin (1961); Russell D. Shelden, Kansas City (1961); W. W. Tillman, Springfield (1960); Carl K. Ness, St. Joseph (1960); Seymour Brown, St. Louis (1959).

Hospital and Professional Relations—Hollis N. Allen, St. Louis, Chairman (1961); W. S. Sewell, Springfield (1961); Stanley S. Peterson, Springfield (1960); Carl F. Vohs, St. Louis (1960); Victor B. Buhler, Kansas City (1959). **Associate Member**—W. F. Francka, Hannibal.

Laboratory Medicine—Victor B. Buhler, Kansas City, Chairman (1960); Angelo Lapi, Kansas City (1961); Fred C. Coller, Springfield (1960); J. Owen Blache, St. Louis (1959); Joseph E. Flynn, Columbia (1959). **Associate Member**—Hollis N. Allen, St. Louis

Physical Medicine and Rehabilitation—D. Elliott O'Reilly, St. Louis, Chairman (1961); F. O. Tietjen, Jefferson City (1961); John Cashman, Kansas City (1960); Frank D. Sundstrom, Springfield (1959); W. J. Stewart, Columbia (1959).

Civil Defense—Carl D. Siegel, Sedalia, Chairman; William C. Allen, Glasgow; H. D. Steinbeck, Union; Carroll C. Hungate, Kansas City; A. S. Bristow, Princeton; John R. Forgrave, St. Joseph; J. M. Canella, Hannibal; Curtis H. Lohr, Clayton; R. Ned White, Springfield; George E. Thoma, St. Louis; George L. Watkins, Farmington; John A. Griffith, Jr., Kansas City (1959).

Special Committees

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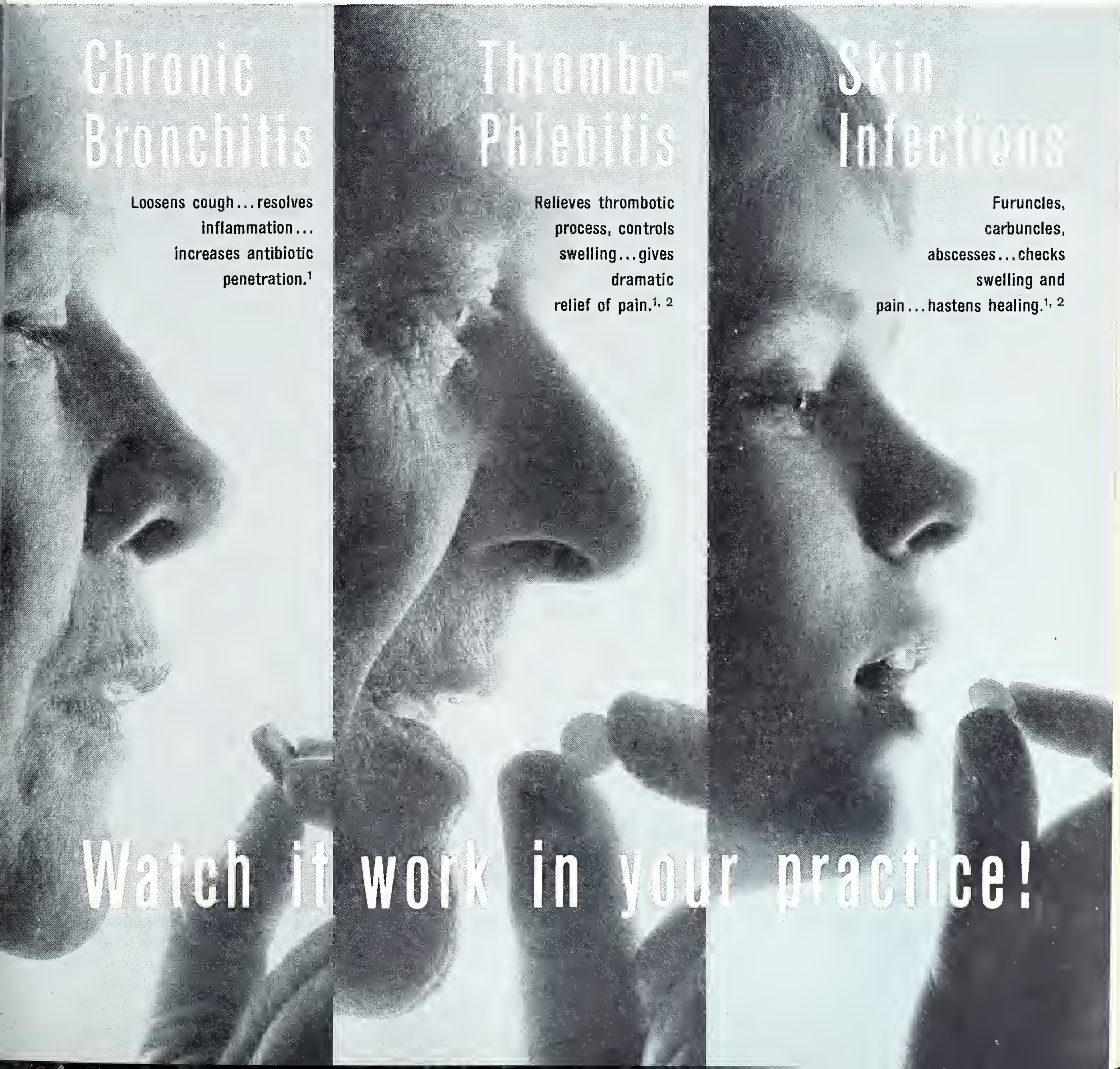
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Loosens cough...resolves inflammation...increases antibiotic penetration.1
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Relieves thrombotic process, controls swelling...gives dramatic relief of pain.1, 2
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Furuncles, carbuncles, abscesses...checks swelling and pain...hastens healing.1, 2
Watch it work in your practice!

Missouri Division of Health

H. M. Hardwicke, M.D., *Acting Director*

SIGNING THE DEATH CERTIFICATE

A death certificate, to be legal value, must be properly signed. If the wrong person certifies to the cause of death, many times, problems of a legal nature arise in regard to the use of the certificate. The physician should be aware of the circumstances under which he should sign the death certificate.

Who may sign the death certificate? This would seem to be a simple question, but records received show misunderstanding and confusion in many cases.

The Attorney General of Missouri, in an opinion dated July 27, 1949, stated that from the law and cases previously tried, he believed that, when applicable, the following recommendations for the certification of death certificates should be followed.

DEATHS DUE TO NATURAL CAUSES

1. When a person dies, the physician last in attendance should sign the death certificate.
2. In the event of a fetal death, the physician, midwife or other person last in attendance should certify to the death and complete a Fetal Death Certificate.
3. If the death occurs without medical attendance, it is the responsibility of the local registrar to inform the local health officer, if he is a physician, and refer the case to him for investigation and certification of the cause of death.
4. If the local health officer is not a physician, or there is no local health officer, the local registrar shall complete the certification of the cause of death.

DEATHS DUE TO UNNATURAL CAUSES

1. The physician, last in attendance, should sign the death certificate, even though the coroner of the county has made an investigation of the case.
2. If there was no physician in attendance, the coroner should sign the death certificate.
3. In either of these cases, if the coroner has not been called, it is the responsibility of the local registrar to inform the coroner that a death has occurred from unnatural causes.

The determination of the proper person to sign the death certificate does not in any way limit the authority of the coroner.

DELAYED DETERMINATION OF CAUSE OF DEATH

If the cause of death cannot be determined within three days, the certification of its cause may be filed after the prescribed period, but the attending physician or coroner must forward to the local registrar of the district in which the death occurred, written notice of the reason for the delay in order that a permit for the disposition of the body may be issued. At a later date, the physician can file a notarized statement with the State Bureau of Vital Statistics certifying to the true cause of death.

If additional information is to be added to the death certificate, after autopsy or laboratory reports are received, this information can be added by a form supplied by the Bureau of Vital Statistics.

All know that it is necessary that a death certificate be filed, but some may not be familiar with all the reasons why this is necessary. The following are a few of the reasons.

1. To be sure that the proper authorities are aware of all deaths both from natural and unnatural causes.
2. To settle estates.
3. To prove eligibility for compensation for the children of a veteran.
4. To aid in studying characteristics of diseases.
5. To aid individual communities to study their own health needs.
6. To settle insurance and pension claims.
7. To improve inheritance rights.
8. To serve as a guide for health agencies in prevention of the spread of epidemics.

Missouri Academy of General Practice

(Continued from page 124)

July 1958: Luke A. Knese, M.D., Irl G. Tremain, M.D., St. Louis; Grover G. Patterson, M.D., Charles H. Isbell, M.D., Carthage; Robert E. Danner, M.D., Hugo D. Zee, M.D., Mark D. Ost, M.D., Claude R. White, M.D., Charles T. Stubblefield, M.D., Kansas City; William P. Dennis, M.D., Flat River; John H. Smathers, M.D., Florissant; Richard P. Bowles, M.D., Liberty; William J. Acuff, M.D., Caruthersville; Lawrence Hayes, M.D., Gashland; George D. Groce, M.D., Fulton; Paul C. Vescova, M.D., Smithville; Thomas A. Morrison, M.D., Aurora; James H. Sweiger, M.D., Maysville; James E. Meyer, M.D., Ballwin; J. E. Taylor, M.D., Pleasant Hill; Roy T. Waltrip, Jr., M.D., Sikeston; Marvin L. Fowler, M.D., West Plains; Paul H. Beckman, M.D., Houston; William L. Fair, M.D., Chillicothe; Joseph A. Nista, M.D., Maplewood; Clement C. DuMont, M.D., St. Joseph.

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1. Editorial: New England J. Med. 258:48, 1958.
2. Vinnicombe, J.: Antibiotic Med. & Clin. Ther. 5:474, 1958.
3. Sheth, U. K., et al.: Ibid., p. 604, 1958.

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Woman's Auxiliary

MRS. HENRY C. (*Esther*) BAUMAN, *President*

Let us focus out attention for awhile upon that part of the Auxiliary program that says we are to extend the aims of the Missouri State Medical Association which looks to the protection of public health and to the advancement of health education. In trying to help protect the public health and advance health education we find many of our avenues of service.

Our new name of Community Service, for the committee formerly called Public Relations, is the committee which is the coordinating unit in this field. We are inclined to think of this committee with the feeling—what is it all about? The committee's work is, in short, all the work that is done unselfishly in the interest of others. Community Service is the liaison to all community activities. To lead us in this work we need someone who can accept people for what they are—a bit of the "what I can't cure I must endure" attitude. This becomes important because we must have the public on our side in sympathetic understanding. We must not be guilty of the prevalent feeling "if you do not think as I think then something must be wrong with you." Instead we need in our leadership that basic understanding which says "I do not believe as you believe but I will try to understand why you believe as you do." This is the first step in good communications.

Much of the basis for good human relationship has always been and will always be influenced by the thought "what you are speaks so loud I cannot hear what you say." We must not undersell this feeling as we deal with others. A service done without sincerity will always be recognized for what it is.

Mr. Brown of A.M.A. told us that community service was the "Act" and public relations the "Result." And he said that this year our program of activity would be directed through the following five avenues: (1) Solving the problems of the aged; (2) the program in sound nutrition; (3) the importance of safety belts; (4) promoting health careers; (5) freedom of choice, a fundamental issue. All these will be worked in cooperation with other groups. He emphasized that a firm foundation of thought for this total program could come from the teachings of the Greeks. They were a strong thinking group of people with much self reliance. They did for themselves and their families. An appeal to the state was a sign of weakness to them. They yielded to none their independent spirit.

Mr. Gates of A.M.A. emphasized that the most important contacts were the ones we could make personally. The most effective communications are the face to face contacts. In other words, know the right people so that you will be able to say the right thing to them at the right time.

In line with this subject of community service comes this from our National President Mrs. Underwood: "A story which has never been told is to be reported at our 1959 convention. I would like every state president to have her county presidents compile the number of hours given by their members to voluntary community service from June 1, 1958, to June 1, 1959. This total will be a gauge of our year . . . a record of service beyond self from the 80,000 members of our organization." I will be writing more about this in my next and last president's letter. The statistics are asked for on the treasurer's report forms. Several years ago the Buchanan County Auxiliary made a similar survey within their own group showing the true picture of an organization's time and ability at work in service within the community. Of course it will be an estimate of sorts. But give thought to it now and it will not be too difficult to collect.

Every chance I have I want to say these two things to you—The State Meeting of the Future Nurses' Clubs will be held March 21 at Columbia in the auditorium of the University Hospital. All clubs are asked to bring scrapbooks, posters or displays of their activities if possible. This information comes from our very capable Jane Stewart. If you want further information write her. Second, again and again may I say please mark the 1959 convention—April 5, 6, 7, on your calendar.

Now returning to the heart and lungs of all good organizations and certainly of our Auxiliary program may I give you this lovely poem read by the national community service chairman at the fall conference.

IT SHOWS IN YOUR FACE

You don't have to say how you live each day
You don't have to say if you work or play
For a tried and true barometer stands out on your face
However you live will show in your face.

The fake, the deceit that you bear in your heart
Never stays inside where it first got its start.
For sinew and blood are a thin veil of lace
What you bear in your heart will show in your face.

If your life has been unselfish, if for others you've lived
Not what you get—but what you give,
If you've lived close to God in His Infinite Grace
You don't have to tell it, it shows in your face.

Missouri Medicine

JOURNAL OF THE MISSOURI STATE MEDICAL ASSOCIATION

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Vol. 56 February, 1959 Number 2

Intestinal Obstruction in the Newborn Infant

J. EUGENE LEWIS, JR., M.D.

Medicine and surgery offer few opportunities as gratifying as the accurate diagnosis and successful treatment of a congenital anomaly in a newborn infant. This is especially true of congenital malformations which involve the gastrointestinal tract and produce some form of intestinal obstruction. The obstruction may be located at any level of the gastrointestinal tract and may be complete or incomplete in type. Not infrequently there may be multiple lesions in a single patient. However, in most instances a correct diagnosis can be made early allowing prompt surgical correction with the salvaging of an infant for an anticipated 70 years of life.

Intestinal obstruction of congenital origin may be due to (1) intrinsic obstruction (atresia and stenosis); (2) extrinsic obstruction (annular pancreas); (3) intraluminal obstruction (meconium ileus, meconium plugs); (4) anomalies of rotation and fixation (malrotation, volvulus, internal hernia, congenital bands); (5) neuromuscular defects (primary intestinal aganglionosis).

There has been much improvement in the morbidity and mortality associated with the surgical correction of intestinal obstruction in the newborn infant during the last decade. Well trained professional personnel and well equipped hospitals are more available. Yet, too many infants continue to die because of the failure of an early diagnosis or because of injudicious surgical management. Clatworthy[1] reviewed the causes of death in intestinal obstruction of the newborn infant at the Ohio State University Children's Hospital. The major contributing factor in 40 per cent was a late or inaccurate diagnosis and 20 per cent of the deaths were related to errors in surgical management. Of the remaining deaths, 15 per cent were due to aspiration and infection, and 25 per cent were due to the pulmonary and nutritional complications of fibrocystic disease, associated major congenital anomalies incompatible with life, and inadequate gastrointestinal function following massive resection. These figures suggest that it is possible to reduce the mortality to 30 per cent or less by emphasizing early diagnosis and proper surgical care. As a matter of record, following emphasis on early diagnosis and judicious surgical care, the mortality for intestinal obstruction in the newborn infant at the Ohio State University Children's Hospital was reduced from 52 per cent prior to 1951 to 27 per cent from 1951 through 1956.

Consequently, it is the purpose of this paper to emphasize early diagnosis and surgical management in an attempt to increase infant salvage in congenital intestinal obstruction (see table 1).

TABLE 1

AIDS TO EARLY DIAGNOSIS

1. Careful examination at birth.
2. Gastric aspiration at birth.
3. Reexamination of abdomen during first 24 hours.
4. Alertness to cardinal manifestations of intestinal obstruction:
    A. Maternal polyhydramnios.
    B. Green vomitus.
    C. Abdominal distention.
    D. Abnormal evacuation of meconium.
5. Early radiographic examination.

EXAMINATION OF THE NEWBORN INFANT

Complete appraisal of the newborn infant is important in making an early diagnosis of intestinal obstruction. Although family history is of limited value, it may alert one to an early diagnosis. A family history of fibrocystic disease or aganglionic disease of the colon may be significant. Obstruction caused by meconium ileus is the

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From the Department of Surgery, St. Louis University School of Medicine and the Surgical Service of the Cardinal Glennon Memorial Hospital for Children.

Associate Professor of Clinical Surgery, St. Louis University School of Medicine and Chief of the General Surgical Section of the Cardinal Glennon Memorial Hospital for Children.

earliest clinical manifestation of fibrocystic disease of the pancreas, occurring in from 10 to 20 per cent of the cases. As a recessive genetic lesion, this disease would be expected to occur in 25 per cent of any given gene mating. However, a familial tendency to aganglionosis is not well defined, although aganglionic obstruction has been reported in siblings.[1]

The initial physical examination following birth may allow a prompt diagnosis of intestinal obstruction if one is alert to the early signs. Inspection must be done in a good light with a search for major abnormalities and a careful evaluation of the abdomen. Upper abdominal distention may be seen when high obstruction is present. Low obstruction produces generalized distention which usually develops slowly. Generalized distention with prominence of the veins of the abdominal wall may be seen in low obstruction present in-utero. The shiny, red and distended abdomen characteristic of meconium peritonitis is easily recognized. One should not be misled by visible or audible peristalsis which is normally present in a newborn infant with a thin-walled abdomen. Unless activity is extremely prominent, little significance can be attributed to it. However, absence of peristalsis is uncommon unless there is a gangrenous bowel, perforation or peritonitis. Inspection of the perineum should establish the presence of a patent anus and its normal location within the sphincter, not anterior or posterior to the sphincter.

Palpation should be done lightly in an effort to feel distended loops of bowel or meconium filled loops suggestive of meconium ileus. The well lubricated finger should be slowly introduced into the anus. If meconium has been passed, the rectum will feel normal. If no meconium has been passed, the rectum will feel stenotic or strictured. Rectal examination may stimulate the evacuation of meconium proving the patency of the gastrointestinal tract.

Finally, initial examination should include the passage of a number 8 or number 10 French urethral catheter into the stomach for gastric aspiration. This maneuver will establish patency of the esophagus. In addition, the aspiration of 50 cc. or more of bile stained fluid will establish a diagnosis of high intestinal obstruction before vomiting occurs.

The initial postnatal examination including rectal examination and gastric aspiration will allow a prompt diagnosis of esophageal atresia, high intestinal obstruction and imperforate anus within minutes following birth.

CARDINAL MANIFESTATIONS OF INTESTINAL OBSTRUCTION

Early diagnosis depends on being aware of the cardinal manifestations of intestinal obstruction in the newborn infant. These are (1) maternal polyhydramnios, (2) green vomitus, (3) abdominal distention and (4) abnormal evacuation of meconium.

The observation of maternal polyhydramnios provides an opportunity for early diagnosis in the delivery room. It is not well appreciated that polyhydramnios in a mother is often the first evidence of alimentary tract obstruction in the fetus. Congenital obstruction is present in-utero. Consequently, the inability to swallow amniotic fluid, as in esophageal atresia, or the lack of sufficient intestinal absorptive surface to assist in the transfer of amniotic fluid to the mother's circulation, as in high intestinal obstruction, will allow the development of polyhydramnios. Maternal polyhydramnios was noted in 18 per cent of the esophageal atresias and 45 per cent of the congenital duodenal and jejunal obstructions at the Ohio State University Children's Hospital. Ingalls and Prindle[2] reported polyhydramnios in 25 per cent of the esophageal atresia cases. Haight[3] noted a similar relationship and observed that maternal polyhydramios was commonly associated with obstruction seen in premature infants. Consequently, when the volume of amniotic fluid exceeds 2,000 cc., and in particular if the infant is premature, congenital intestinal obstruction should be suspected.

Newborn infants frequently vomit small amounts of gastric fluid, but this need not be of concern to the attending physician unless the vomitus contains bile. In the neonatal period, vomiting of bile-stained material is invariably associated with intestinal obstruction. This statement should be qualified to exclude premature infants, especially those under 4 pounds in weight. These infants frequently vomit bile in small amounts, have abdominal distention, and scanty meconium. Rectal irrigation, gastric aspiration and repeated examinations are necessary to avoid an unnecessary exploration. However, for the full term infant, green vomitus signifies intestinal obstruction and calls for prompt radiographic examination.

Abdominal distention is another significant manifestation of intestinal obstruction. It may be obvious early and be generalized or confined to the upper abdomen or it may develop slowly and insidiously in the low obstructions. All nursery personnel should be alert for evidence of distention. This development may be suggested by lack of meconium stools, passage of scanty stools or diarrhea.

Finally, one must be alert to the passage of normal meconium. At the time of birth, 60 to 200 grams of thick viscid meconium is present in the colon. Consequently, a meconium stool may occur at any time—during delivery, in the delivery room or in the nursery. More than 90 per cent of full term infants pass meconium within 12 hours after birth and before the end of 24 hours. Failure to pass meconium within 12 hours after birth should be a warning signal and failure to pass meconium 24 hours after birth a danger signal. The passage of meconium may be stimulated by a rectal examination. If this simple method fails, prompt radiographic examination is necessary. In addition, scanty meconium stools or diarrhea should alert personnel to the possibility of an incomplete obstruction and signs of early distention.

In the nursery, the attending physician is dependent on the recorded observations of busy, constantly changing nursery personnel. Frequently, meconium-like material is passed and recorded as a normal meconium stool. The amount and character of a stool is frequently not recorded. Too frequently, anything that stains a diaper is recorded as a stool. For these reasons, I believe the responsible physician should not be satisfied with the observations of the passage of meconium recorded by nursery personnel. This record may give the physician a false sense of security. Rather, I believe the physician should reexamine the abdomen of all newborn infants during the first 24 hours after birth. This will allow early detection of abdominal distention in the incomplete or complete obstructed infant when the nurse or mother's observations are inaccurate or misleading. If an early diagnosis of intestinal obstruction is going to be made, the importance of green vomitus, abnormal evacuation of meconium, and abdominal distention during the first 24 hours of life can not be overemphasized to all physicians and nursery personnel.

RADIOGRAPHIC EXAMINATION

No examination of an infant suspected of having intestinal obstruction is complete without radiographic examination. To rule out a diagnosis of intestinal obstruction without radiographic examination is presumptuous. To make the diagnosis by radiographic examination without a physical examination is irresponsible. The aggressive use of radiographic examination will result in an occasional negative film. However, the physician must be willing to accept these films as a tribute to his aggressive alertness, not as a criticism of his diagnostic skill.

Swallowed air provides the radiologist with an excellent contrast medium.[4] Occasionally air may be injected into the stomach through a catheter for better contrast. However, the use of barium as a contrast medium by mouth is not necessary and adds the danger of aspiration. All radiographic examinations for intestinal obstruction in the newborn infant should be done in the radiology department. Even very sick infants can be transported in an incubator to which emergency oxygen is attached. The initial examination should consist of an upright film taken with the infant's arms straight up along its head providing a sharp view of the chest and abdomen. The position of the stomach, subdiaphragmatic collections of air, and air and fluid levels in the stomach and intestines may be readily seen. Occasionally, films taken with the infant in the lateral decubitus or upside down position are helpful.

The aggressive use of radiographic examination is important in making an early diagnosis of high intestinal obstruction. These infants may vomit a large amount of green material. Yet, when the infant is examined by the physician, the abdomen will be flat and show no signs of distention, intestinal patterning or abnormal peristaltic waves because of the decompression effected by vomiting. However, an upright scout film of the abdomen will reveal trapping of air in the duodenum which is pathognomonic of high intestinal obstruction.

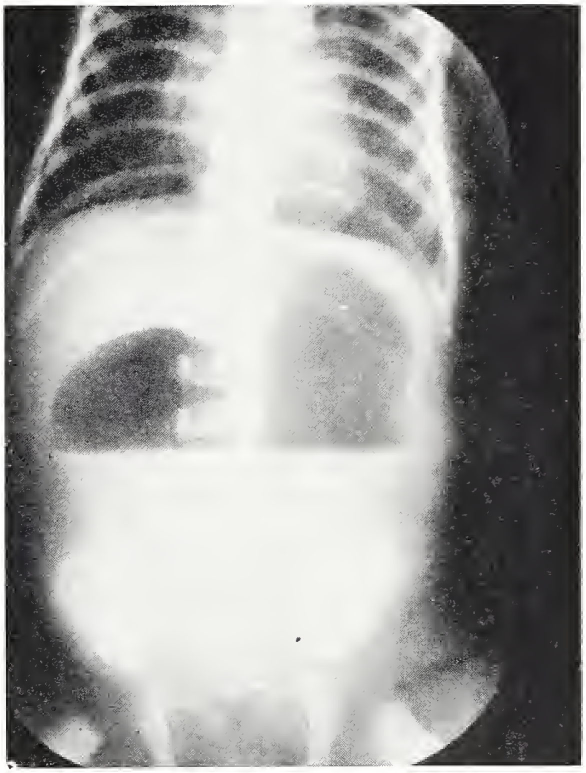
Fig. 1. Duodenal obstruction (annular pancreas and atresia).

High intestinal obstruction such as a stenosis or atresia of the duodenum usually produces a double bubble or a single high U-shaped fluid and air filled loop with an absence or paucity of gas below this point (fig. 1). Dilated upper loops of intestine signify jejunal obstruction (figs. 2 and 3). Generalized dilation of the bowel indicates low obstruction (fig. 4). One may also see dilated loops of bowel varying in size with scattered flecks of calcium and no fluid levels suggesting obstruction secondary to meconium ileus.[5] Intraperitoneal calcification is pathognomonic of meconium peritonitis. Free air in the peritoneal cavity is indicative of perforation. An excessive amount of intraperitoneal fluid may corroborate the clinical impression of acute gangrenous obstruction.

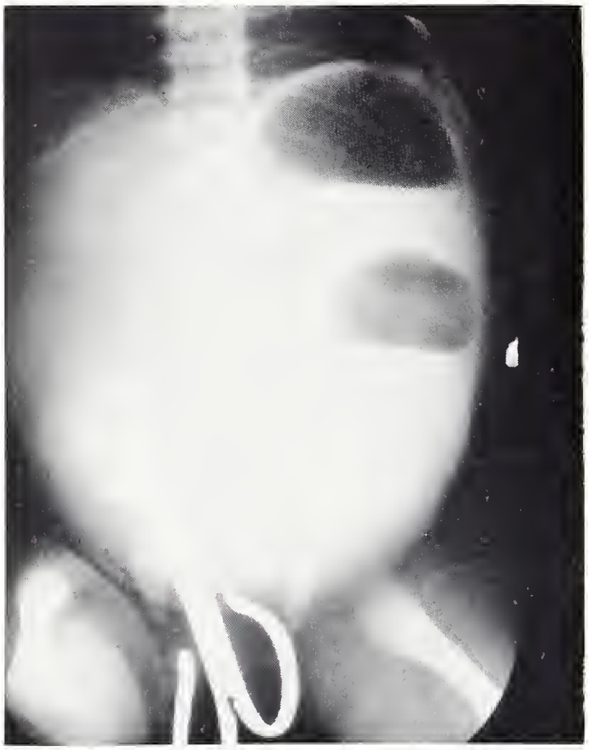

Fig. 2. High jejunal obstruction (atresia).

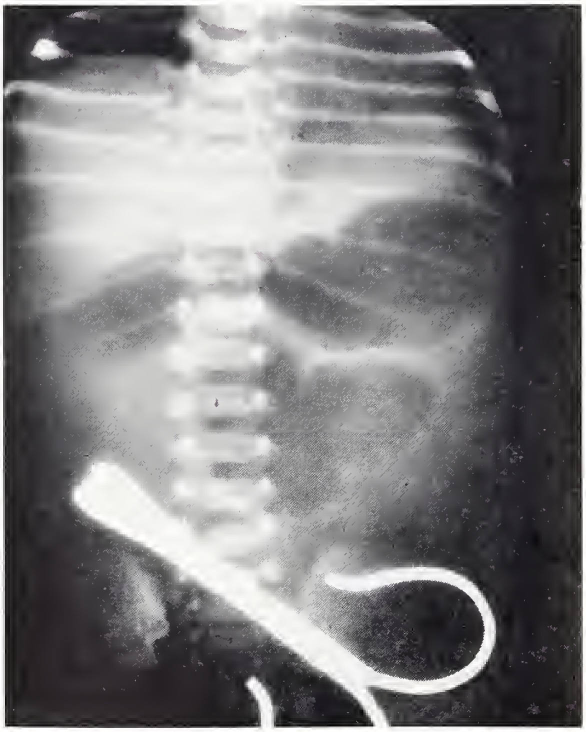

Fig. 3. Mid-jejunal obstruction (atresia).

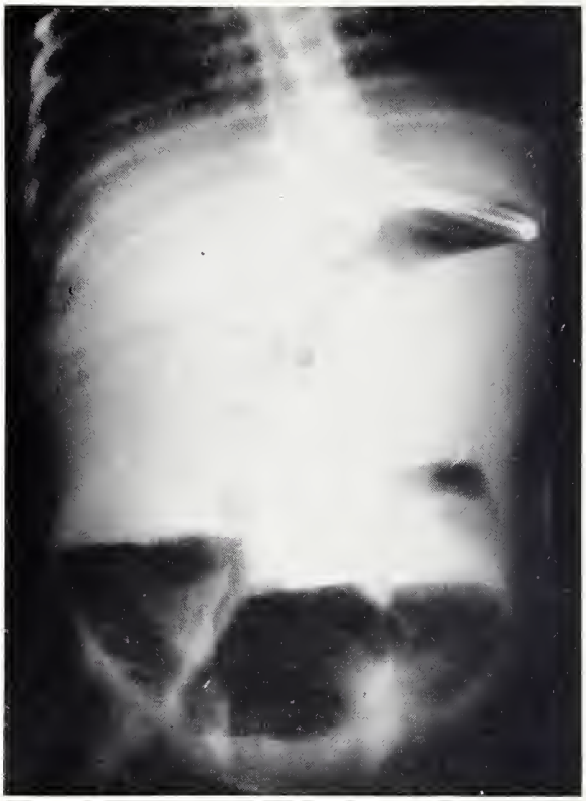

Fig. 4. Ileal obstruction (atresia).

Occasionally, tubular calcifications are seen which are believed to be evidence of previous ischemia or necrosis of the bowel wall.

However, it should be emphasized that it is not essential that time and effort be spent making a precise diagnosis of the cause of high obstruction. It is important to make a diagnosis of high obstruction in order that prompt therapy may be carried out. Congenital bands, stenosis, atresia, annular pancreas, or malrotation of the colon as causes of high intestinal obstruction may present similar radiographs. A dilute contrast enema is preferable to outline the colon, demonstrate its normal position and prove its patency in infants with high obstruction. This procedure may be omitted, but the information is invaluable during surgical exploration in planning specific therapy and in eliminating multiple anomalies and obstruction in the colon. Although patency of the small intestine is easily demonstrated at the time of surgical exploration, it is difficult and traumatic to establish colon patency at that time.

Low intestinal obstruction presents a slightly different problem. It is important to realize that the radiologist can not differentiate, with certainty, dilated small bowel and dilated colon in the scout film of a newborn infant. Consequently, a scout film which appears to show unquestionable low intestinal obstruction with generalized distention of the small intestine may represent obstruction of the colon. For this reason, every newborn infant with a radiographic diagnosis of low intestinal obstruction should have a contrast enema (fig. 5 and 6). I have used dilute barium and, more recently, hyopaque. This procedure will differentiate large from small bowel obstruction, will indicate the type of colon obstruction which may exist, will demonstrate the patency of the colon and will determine whether intestinal rotation is complete.

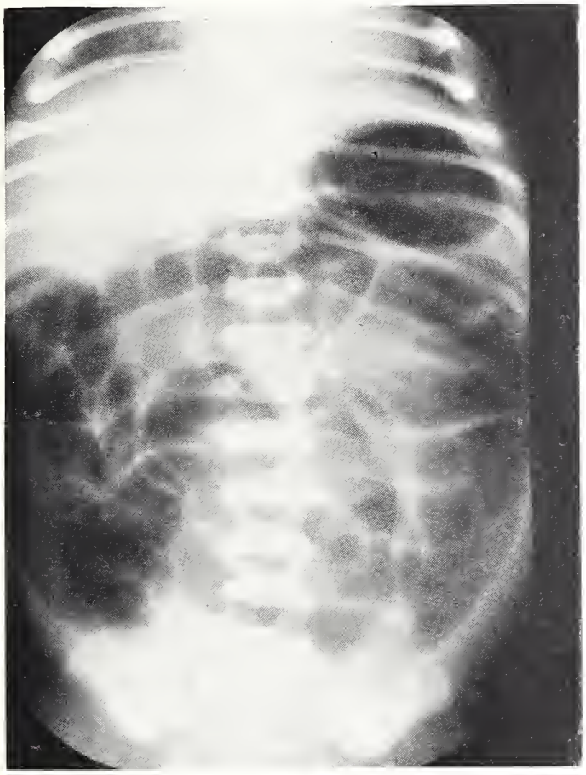

Fig. 5. Scout film of infant with low obstruction.

In the presence of small bowel obstruction, the colon will be unused and microsize. If the lesion involves the large bowel, the point of obstruction will be demonstrated by the barium column. If the infant has meconium plug syndrome,[6] the colon will be narrow to the point of obstruction, usually in the region of the splenic flexure. Expulsion of the plug may follow the barium enema. If this diagnosis is made, it must be corroborated by a repeat contrast enema which will reveal progressive enlargement of the narrow colon segment noted in the initial examination. In true Hirschsprung's disease or aganglionosis of the colon, the aganglionic area of the colon will be small, but there will be proximal dilation of the colon.[7] If there is diffuse aganglionic disease involving the entire colon, contrast media will be seen to pass through a small colon and reflux into a dilated ileum. This differentiation is important.

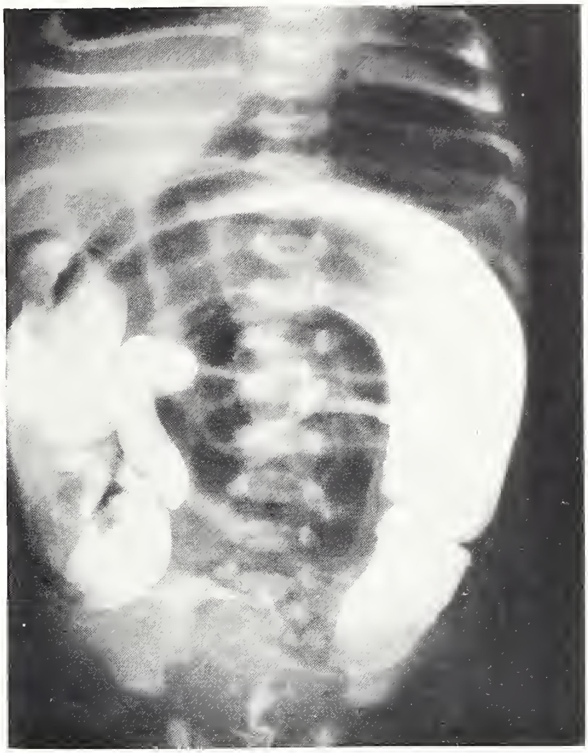

Fig. 6. Same patient as seen in figure 5. Contrast enema demonstrates dilation of proximal colon and the narrow aganglionic rectum and rectosigmoid.

If obstruction is caused by a meconium plug, evacuation of the plug will relieve the obstruction and prevent an unnecessary laparotomy. If the obstruction is caused by aganglionosis of the colon, decompression may be accomplished promptly by colonic irrigation with saline solution. Following decompression, a diagnostic biopsy and proximal colostomy or ileostomy may be done with less urgency and hazard to the infant.

SURGICAL MANAGEMENT

The surgical management of congenital intestinal obstruction is well presented by Gross,[8] Potts[9] and Swenson.[10] It is not the purpose of this paper to describe in detail surgical management. However, a summary of pertinent procedures will be given.

If early diagnosis has been made, fluid therapy can be minimal. If diagnosis has been delayed, blood volume defects should be corrected and major alterations of water and electrolyte imbalance remedied prior to surgical intervention. Fluids and blood are best given through a polyethylene catheter inserted in an ankle vein.

Transverse incisions, dividing both recti, give superb exposure without vigorous retraction of wound margins. These incisions heal well leaving a thin scar. Technic must be gentle with the use of fine needles and fine silk sutures. I prefer the use of 4-0, 5-0, and 6-0 braided silk. Skillful anesthesia gives excellent relaxation and minimizes trauma.

For atresia or stenosis of the duodenum, a side-to-side isoperistaltic duodenojejunostomy is preferred. If annular pancreas is present, a similar by-pass procedure is advisable. Division of the pancreatic ring is unwise because of the hazards of a pancreatic fistula. Furthermore, duodenal stenosis or atresia commonly accompanies an annular pancreas. Congenital bands should be divided. If there is an associated malrotation of the cecum, the colon must be freed and placed in the left side of the abdomen. Midgut volvulus should be gently reduced by counter-clockwise rotation and the associated malrotation corrected. Always remember a widely dilated duodenum may contain an intrinsic web obstruction.[11] This is not infrequently found associated with malrotation. Consequently, patency of the duodenum must always be determined before closing the abdomen.

Atresias below the ligament of Treitz are best corrected by excising the bulbous hypertrophied proximal bowel and reconstructing the bowel with an end-to-end or end-to-side anastomosis. This may be done in layers or preferably, as a single layer. Fine atraumatic needles with 5-0 and 6-0 silk are preferred.

Meconium ileus presents many problems in management. The use of a diverting ileo-transverse colostomy,[12] the exteriorization method of Gross, enterotomy, irrigation and evacuation of meconium with dilute hydrogen peroxide[13] and the Roux-en-y procedure of Koop[14] have merit. I prefer excision of the dilated, hypertrophied proximal ileum, evacuation of inspissated meconium from the distal ileum and an end-to-end reconstruction with a single layer silk anastomosis.

Hirschsprung's disease or aganglionosis of the colon requires a biopsy of the muscle layers in the non-dilated bowel to demonstrate the lack of ganglion cells. Proximal decompression by means of a colostomy or ileostomy, depending on the upper limits of the aganglionosis, is strongly urged. The mortality is high in infants with aganglionosis of the colon if decompression is not effected promptly following diagnosis. A Swenson pull-through procedure is best deferred until the infant's weight reaches 25 to 30 pounds.

In all obstructions, patency of the bowel must be ascertained in order to eliminate multiple anomalies. In addition, I insert a No. 14 French or mushroom catheter into the stomach, creating a Stamm type of gastrostomy in all cases. This catheter is invaluable for postoperative decompression and supplementary feedings. The gastrostomy should never be omitted in premature infants.

Postoperative care must be meticulous and highly disciplined. There must be continuous supervision by trained nursery personnel and alert house staff if overhydration, aspiration pneumonia and infection are to be prevented or combated.

Early diagnosis, proper surgical treatment, and alert, disciplined care will save a high percentage of the infants with congenital intestinal obstruction. One must never be satisfied with the comment "The baby died, but then, it was just a few days old." This is not an alibi—it is an indictment.

CONCLUSION

Early diagnosis and prompt judicious surgery are emphasized as the most important factors in decreasing the mortality in infants with congenital intestinal obstruction.

634 N. Grand Blvd.

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DR. SANTE HONORED BY RADIOLOGY SOCIETY

The American College of Radiology will award its Gold Medal to LeRoy Sante, M.D., St. Louis, at a meeting on February 6 in Chicago. It is given for "distinguished and extraordinary service to the American College of Radiology and to the profession for which it stands."

A similar award will be made posthumously to the late C. Edgar Virden, M.D., Kansas City.

The Impact of Acute Myocardial Infarction

ANTHONY R. TORTORA, M.D., *Brooklyn, N. Y.*

THE VIRTUAL EPIDEMIC of acute myocardial infarction which has prevailed in the United States for some time, the publicity given to President Eisenhower's "coronary" attack as well as the publicity given to notables of every walk of life who have been victims of "coronaries," has evoked almost infinite discussion of the various features of this clinical entity in both professional and lay publications since Herrick's classic report.[1]

Concern about the body, a normal and healthy part of growing up, has been exaggerated to a morbid degree, perhaps inadvertently, by mass media. Is it any wonder that the specter of a heart attack creates blind terror in the patient's mind. The attack produces fear and this supplies the "trigger" for the unleasing of anxiety and other emotional manifestations. The psyche plays an important symptomatic role. Through the psyche, desirable and undesirable effects upon the course of disease may be enhanced or induced. If these "psychic" manifestations are allowed to continue, especially in emotionally unstable individuals, an eventual psychoneurosis may occur.

Most people are fortunate in enjoying good health all their lives. When ill, it probably was because of an "upper respiratory" infection, a mild headache or some other form of temporary physical disturbance which was annoying while present but soon forgotten with the cessation of the disturbing symptoms. This is as it should be. Man should be able to cope with transient physical and psychologic stresses without allowing them to disrupt his ordinary modes of behavior. The so-called "normal" individual usually does so. One thing must be borne in mind, however, and that is that when such temporary physical disturbances occur they are quite often superimposed upon other stresses and strains of a longer and more serious nature. The vexations associated with earning a livelihood, with the socio-economic status, the health and welfare of families and the entire range of problems that make life a complicated process are constant. When one becomes sick, these ordinary vexations continue but become more complex and more difficult to bear by the additional loads resulting from sickness. Nor should one overlook the fact that anxieties are in and of themselves definite causes of illness just as often as they are complicating concomitants of organic disease. This concept should not prove difficult to understand for doubtless all remember the rather excessive annoyance which such transient illnesses have afforded. Once these experiences are seen in their proper perspective, it is easier to understand the emotional reactions and behavior of those who are afflicted with a prolonged malady.[2]

There is a level of fear and anxiety which is entirely normal and which indeed may be useful since it motivates patients to adhere strictly to the regimen laid down by the physician. However, there is a form of anxiety which is of such intensity as to interfere with or aggravate the course of the myocardial infarction. It is this form of anxiety that one must constantly watch for so that all the knowledge in the psychotherapeutic armamentarium can be used to arrest, neutralize and possibly eliminate it. The first concern above everything else is to continue to survive and a heart attack constitutes a threat to survival. The patient will be markedly apprehensive in regard to the outcome of his attack; and will be in great terror and believe this attack signifies the end of things socially, financially, physically and sexually.

My associate (M. Riemer) and I have found in preliminary studies that injury to the heart with its incapacity brings with it an actual disability for about a three month period. One of the most obvious signs noted was the overpowering feeling of helplessness which ensues with the disability incident to the myocardial infarction. These subjective symptoms produce multiple emotional responses, depending upon the sensitivity and vulnerability of the individual. The responses noted were profound depression with feelings of futility and marked embitterment with paranoid responses to those whom the individual feels helped to bring on the attack, a catastrophic feeling of impending death and a generally pronounced anxiety. Hardly any person with an acute myocardial infarction does not suffer one or more of these emotional manifestations. As a result of the attack, the patient has to be deprived of certain pernicious outlets that he had before, such as excessive use of tobacco, over-indulgence in alcohol, excessive exercise and generally increased activity. The threat of these deprivations and the severance of such outlets are provocative of a great deal of anxiety. During his attack he is subjected to quiescence. Can he with his psychic structure subject himself to this regimen of inactivity? These matters have to be assuaged through psychotherapy.

It is important that the physician clearly show concern by a close, kindly and understanding attention. This includes careful attention to what the patient tells him. If the physician shows the simple human patience this requires, and if he possesses a professional confidence that his knowledge and insight into human behavior will add something of

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Assistant Attending Physician, Internal Medicine, Coney Island Hospital, Brooklyn, N. Y.

value to the patient, the initial step toward effective medical treatment has been accomplished.[3] Everyone has a highly emotionalized concept of themselves as a functioning individual. So it must be borne in mind by the physician that patients possess an emotional equipment which is an integral part of physiologic function. Hence, one must be cognizant to the basic fact that human relationship represents an important addition to the repertoire of fundamental medical concepts and treatment of patients with myocardial infarction. One of the most important determinants of the emotional complex that makes up the doctor-patient relationship is the fact that the patient is dependent on the physician for help. Just as the physical growth of the organism depends on an adequate and balanced supply of appropriate foodstuffs, so does emotional growth rely upon the proper psychologic nutrients. Emotions have the capacity to exert influence and thereby change behavior. There is a period in life of entire dependency on others, that is during infancy and early childhood. Since the attack of myocardial infarction and the process of seeking aid from the attending physician represents a re-enactment of this stage of dependency, it is only natural that many difficulties, feelings and behavioral reactions met with during the early childhood of the patient will be revived and unconsciously brought to the surface during the doctor-patient relationship. During illness, emotional and behavioral regression may occur. The physician must be aware of this "psychologic" regression since it represents the recurrence of the dependency aspects of the early child-parent relationship.

No problem can be more distressing than that presented by the patient with acute myocardial infarction who feels that death or chronic invalidism is inevitable. What is the proper attitude and approach? I am certain that physicians have pondered over this question. There is no hard and fast rule. Many variables influence the decision, among these are the severity of the infarct as well as the personality and background of the patient. Other factors are external circumstances such as his own desires and character, the wishes of his family, his religious connections and his state of affairs. How much patients are to be told is an individualized prescription. The physician is not really concerned with teaching the patient the "physiopathologic" picture of the infarction, but in attempting to let him pass through the phase of incapacity with a minimum of anxiety and a maximum of hope and courage. It should be mentioned that the proper approach should be one of optimism and perseverance. The decision as to whether or not to discuss the exact extent of the attack depends as mentioned on complete understanding of the patient's personality. They can be helped immeasurably with the right kind of reassurance, and this should be given when the patient is prepared to receive it. The next of kin is usually told the exact truth. This may be modified depending upon the patient's role, i.e., if the patient is the pivotal character on which the family revolves. If so, the family or next of kin may well break down if given information more than they can absorb at that one time. They may have to be fed piecemeal as they adjust to changing events.

Early in the acute phase of the attack, as soon as the period of pain or dyspnea and the emotional responses occurring at the onset have abated, the patient becomes anxious about the effects he may expect from his illness. He may express this by asking questions such as, "Is it serious doctor?" "Will I be all right?" Simple as these questions or queries may first appear, they usually signify underlying apprehension. Quite often physicians who are not geared to psychosomatic orientation and awareness, feel that a few words of encouragement or cheer that they give their patients should be enough to minimize their fear and anxiety. The spoken word is only part of the approach. It is not sufficient to merely tell the patient he is improving. He must be made to feel it. When reassuring the patient it is essential to radiate warm, comforting and stimulating looks; for the eyes convey warm positive affection. The eyes are particularly adapted for emotional activity. A free transmission of every possible emotion through these organs is present in the healthy person.[4, 5]

Just when the physician feels he has the patient acclimated psychologically, he may begin to notice a change in the mental state and in emotional behavior. The physician asks himself, "What is wrong?" If the situation is analyzed, one will find in the majority of cases that the prescription of prolonged bed rest will be interpreted as evidence of progressive heart disease by the patient; for bed rest among other detrimental effects "saps morale, provokes desperation and unleases anxiety."[6] There has been a considerable change in thought and attitude relative to prolonged bed rest in myocardial infarction.[7] While the early assertions were at that time reasonably propitious for extended bed rest, experience has taught recognition of inadequacies in initial concepts and methods of handling this particular phase of treatment.

It is important that the patient see the necessity for adjustment to his limitations lest he continue to struggle against insuperable odds. Cultivating the patients' ability to see things objectively is a better policy than mere suggesting or authoritarian advice, however effective any of these may be for a time. Physicians should engage their patients in friendly unhurried sympathetic talks so that misunderstanding and fear is removed. This can be achieved only by good rapport, i.e., doctor-patient relationship from the onset.[8]

The harmful effects of trepidation, apprehension and despair can be neutralized and possibly even superseded by the instillation of the positive virtues of courage, patience and optimism as well as the discontinuance of prolonged bed rest as soon

Poison Control Centers in St. Louis

J. NEAL MIDDELKAMP, M.D., *St. Louis*

PHYSICIANS DESIRING information regarding the toxicity of any drug or product that a patient has ingested may call the St. Louis Poison Control Center at the St. Louis Children's Hospital, FOrest 7-6880. This center is located in the emergency room of this hospital.

INTRODUCTION

During the last ten to fifteen years, increased attention has been focused on the problem of the accidents that happen to children. One facet of this problem in which medicine can play a part is in the reduction of mortality as a result of ingestion of poisonous or toxic agents. As a direct result of the cognizance of this problem, the first poison control center was established in the city of Chicago by Dr. Edward Press in 1953. With the help of many physicians and various societies (The American Academy of Pediatrics, The American Public Health Association, The Academy of General Practice, and others) poison control centers have now been established in more than one hundred cities throughout the United States. At the present time the Division of Health of the State of Missouri is in the process of establishing such centers throughout the state. The development of a poison control center in St. Louis started in late 1954 and became a reality in the early part of 1955. Members of the St. Louis Pediatric Society established a Committee on Accidents and Poisons, and, as a direct result of the work of this committee, the Poison Control Centers of St. Louis were established. This committee, with a nucleus of pediatricians, includes a member of the American College of Apothecaries and representatives from the St. Louis City and County Health Departments. These centers are dedicated to a single purpose, the accumulation of information on all products that might have poisonous constituents. The information includes symptoms of toxicity and suggested treatments and is available to any physician who requests it.

THE POISON CONTROL CENTERS IN ST. LOUIS

In establishing poison control centers in the City of St. Louis and the St. Louis County area, the hospitals with the largest pediatric services were designated as major centers. These are St. Louis City Hospital, Homer G. Phillips Hospital, Cardinal Glennon Hospital, St. Louis Children's Hospital and St. Louis County Hospital. Certain literature (see table 1), including books on toxicology, poisonous plants and pharmacology, is located in each of these major centers. A list of products considered essential in the treatment of any patient who has ingested a toxic substance was compiled, and each center, has these products ready for immediate use (see table 2). A Cardex file was given to the St. Louis center by the members of the St. Louis Chapter of the American College of Apothecaries. The original indexing system was obtained from the Florida Chapter of the American Academy of Pediatrics, since this state organization was one of the first to develop an extensive reference card file system. Subsequently, the file has been expanded by the addition of cards made out by members of the Committee on Accidents and Poisons and also is being supplemented periodically by cards obtained from the National Clearing House of Poison Control Centers, which was es-

TABLE 1

BOOKS AT MAIN POISON CONTROL CENTERS

1. *Poisoning*, Van Oettingen, P. B. Hoeber, Inc., New York, 1952.
2. *Physicians' Desk Reference*, Medical Economics, Inc., Oradell, N. J., current year.
3. *Poisonous Plants of the United States*, Muenscher, Walter C., Macmillan Co., 2nd Edition, New York, 1951.
4. *Accidental Poisoning in Childhood*, American Academy of Pediatrics, 1801 Hinman, Evanston, Ill., Charles C Thomas, Publisher, Springfield, Ill., 1956.
5. *Clinical Toxicology of Commercial Products*, Gleason, Marion N.; Gosselin, Robert E.; Hodge, Harold C., Williams and Wilkins Co., Baltimore, 1957.
6. *Handbook of Emergency Toxicology*, Kaye, Sidney, Charles C Thomas, Publisher, Springfield, Ill., 1954.
7. *Symptoms and Treatment of Acute Poisoning*, Lucas, G. H. W., Macmillan Company, New York, 1953.
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Assistant Professor of Pediatrics, Washington University School of Medicine.

Director, St. Louis Poison Control Center, 1954-1957.

Myocardial Infarction—Continued

as reasonable in myocardial infarction, since bed rest among other effects is hazardous from a psychologic aspect.

8303 Fourth Ave.

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TABLE 2

EMERGENCY EQUIPMENT

Activated charcoal
Aminophylline
Amyl nitrite pearl
Atropine sulfate (hypodermic tablets)
Caffeine sodium benzoate
Calcium gluconate (10 per cent)
Codeine sulfate (hypodermic tablets)
Ephedrine hydrochloride
Epinephrine, aqueous
Glucose solution (sterile)
Magnesium sulfate
Methylene blue
Morphine sulfate (hypodermic tablets)
Nikethamide (Coramine)
Phenobarbital, tablets
Picrotoxin
Saline, normal
Sodium amytal
Sodium bicarbonate solid
Sodium formaldehyde sulfoxalate
Vitamin C
Vitamin K
Stomach tubes—2 or 3 different calibers applicable for oral passage on infants 6 months to 6 years (size 10, 12, 14)
Two 10, 20 and 50 cc. syringes (sterile)
A rubber bulb or ear syringe for suction on stomach tube
Infants' and children's size oral airways
Oxygen—positive pressure oxygen masks with rubber bag for bag breathing

TABLE 3

STUDY OF LAVAGE FOR INGESTION OF POISON

Type of Poison	*1956*	*1957*
Salicylate	99	97
Petroleum Distillates:		
Alcohol	1	2
Furniture polish	2	4
Gasoline	2	3
Kerosene	2	16
Lighter fluid	0	3
Oil	2	0
Turpentine	4	3
Lye (do not lavage these patients)	2	8
Household Products:		
Air Wick	1	3
Ammonia	0	2
Borax	0	2
Cigarettes	1	1
Creosote	1	0
Cloth dye	1	3
Deodorant	1	3
Dexol	0	3
Lysol	3	1
Match tlps	0	3
Moth balls	3	10
Paint	0	3
Perfume	4	1
Purex	4	7
Silver polish	1	0
Soilax	0	1
Starch (laundry)	0	1
Talcum powder	0	1
Vinyl cement	1	2
Wax, floor	1	2
Wax, shoe	1	3
Window cleaner	1	1
Medications:		
Anahist	3	1
Bactine	0	1
Barbiturates	8	7
Benzadrine	0	2
Boric acid	1	1
Calcium pills	0	1
Calomine lotion	0	1
Camphor (and compounds)	3	7
Cheracol	2	1
Codeine	1	1
Coricidin	0	1
Corn remover	0	1
Cortisone	0	2
Dramamine	0	1
Ex-Lax	4	3
Geritol	0	1
Histadyl	0	1
Mercurial ointment	6	0
Neo-Synephrine	0	1
Nitroglycerin tablets	0	1
Paregoric	2	2
Pyribenzamine	1	1
Probanthine	1	1
"Reducing" pills	1	2
Rybutol	0	1
Serpasil	0	2
Strychnine	0	2
Sudaphed	0	1
Sulfadiazine	0	1
Thorazine	1	1
"Throat discs"	0	1
Thyroid pills	1	3
Vermifuge	2	0
Zinc oxide	1	0
Pesticides:		
Arsenic (roach powders)	5	12
C-N	1	0
DDT	1	1
"Insecticide"	7	12
Mouse poison	0	2
Rat poison	1	2
Wheat poison	0	1
Plants, etc:		
Castor bean	0	5
Mushrooms	0	1
Plant tablets	0	1
Poke berries	0	1

tablished by the United States Public Health Service. This National Clearing House has been functioning since August of 1957 and distributes monthly bulletins on specific toxicologic problems that have been reported to it. These bulletins are then filed to supplement the information available from pharmacologic, toxicologic and commercial sources. Minor centers, with less extensive information, have been established at all of the other hospitals with pediatric services in the St. Louis area.

Each major center is operated on a twenty-four hour basis by the resident staff in conjunction with the emergency room. In July or August of each year, when the resident staff changes at each hospital, one of the members of the Committee on Accidents and Poisons, with the permission of the administrator of the hospital, orients the new residents regarding the function of the poison control centers. They are told how and where they may obtain further information that is not available to them in their own institution.

In the early stages of the development of the St. Louis poison control center, the report forms for patients treated in the emergency room or hospitalized for the ingestion of poisonous substances were modeled after those used by Dr. Press in the Chicago Center. The National Clearing House has since developed a standard form for making reports on all poison cases. Statistics obtained from these forms have been useful in the education of parents regarding "poison-proofing" their homes. St. Louis statistics are now being compiled by the National Clearing House.

ST. LOUIS CHILDREN'S HOSPITAL POISON CENTER

According to the records at the center at the St. Louis Children's Hospital, an average of about one child per day was treated in the emergency room of that hospital for the ingestion of some toxic or potentially toxic substance during 1956 and 1957. From table 3 one can see the wide variety of substances that children will ingest, with salicylate (usually in the form of aspirin) being the material most often ingested. Another commonly ingested group of substances is the petroleum distillates (including gasoline, kerosene, turpentine and lighter fluid). Lye is often ingested and unfortunately produces rather severe corrosive burns of the mouth and esophagus. In 1957, 60 patients were admitted to the St. Louis Children's Hospital following the ingestion of some toxic substance.

SURVEY BY DR. NORVAL

Dr. Mildred Norval of the St. Louis County Health Department was a member of the Committee on Accidents and Poisons. In 1955 and 1956 she carried out a pilot study with the kind cooperation of the Public Health nurses of the St. Louis County Health Department.

During the eight month period when this survey was conducted, there were two deaths as a result of poisoning in the St. Louis County area. During this same period in this same area, there were 101 cases of poisoning reported. This survey pointed out again the high incidence of ingestion of salicylate and petroleum distillates. The greatest incidence of accidental ingestion of toxic substances was found in the 1 to 3 year age group (see table 4). Dr. Norval's study also revealed the times of day that these substances were most commonly ingested (see table 5). Boys outnumbered girls at a ratio of 1.63 to 1. (The ratio of boys to girls at birth is about 1.05 to 1.)

TABLE 4

AGE DISTRIBUTION

Age, Years	*Total*	*Per Cent*
Under 1 year	1	1.0
1	26	25.7
2	48	47.5
3	15	14.9
4	7	6.9
5 and over	4	4.0
Not stated	0	0

TABLE 5

TIME OF DAY THAT POISON WAS INGESTED—
ST. LOUIS COUNTY AND CITY

Time of Day	*Number of Poisonings*	*Per Cent of Total*
7:00 a.m.	9	2.3
8:00	12	3.1
9:00	25	6.5
10:00	32	8 3
11:00	39	10.2
12:00 p.m.	30	7.8
1:00	16	4.2
2:00	19	4.9
3:00	31	8.1
4:00	19	4.9
5:00	22	5.7
6:00	29	7.6
7:00	16	4.2
8:00	23	6.0
9:00	28	7.3
Not stated	34	8.9

The Public Health nurses were able to visit the homes of 92 per cent of the 101 cases for the purpose of helping the parents "poison-proof" their homes. They found that the toxic substance ingested was located in the kitchen in 47.3 per cent of the cases. (This agrees with other reported groups.) In order of decreasing importance were the bedroom, bath room, basement, other rooms of the house, and out of doors. The substance was within easy reach of the child in 62 per cent of all the cases. It was out of its customary place in the home in 72 per cent of the cases. One or both parents were at home at the time of ingestion in about 85 per cent of the cases. In only 3.2 per cent of these cases was someone 15 years of age or younger watching the child. The most important feature of these home visits by the nurses was that they felt they discovered potentially hazardous poisons still improperly placed in 80.6 per cent of the homes. The nurses were well received in these homes, and the parents sincerely appreciated their efforts.

FOLLOW-UP EDUCATION

Many other methods of education of the public have been carried out by the Poison Control Committee. The newspapers in the area have presented the program to their readers, stressing to parents the ways in which their homes may be freed from such hazards to their children. Through the medium of television broadcasts, the program has been presented to parents, again emphasizing methods of removing hazards from their homes.

In one of the hospitals a large map of St. Louis is in the waiting room of the pediatric ward. There are pins on the map representing children treated for accidents or for the ingestion of poisons. Another pediatric clinic waiting room will soon have a series of slides showing hazards about the home. These slides will be shown at frequent intervals each day while the parents wait with their children. Last, but not least, the State Division of Health is now providing literature on "poison-proofing" homes. These are enclosed in material sent to the parents of newly born children.

SUMMARY AND CONCLUSION

1. Poison control centers have been established in the Greater St. Louis area and are now operating on a twenty-four hour basis.
2. The methods of establishing and utilizing these centers in St. Louis have been discussed.
3. Statistics obtained from these centers have been presented.
4. Methods of educating the public in ways to eliminate potential hazards in the home are mentioned.

500 S. Kingshighway

Quinidine

DANIEL E. HILTY, *Columbia*

CINCHONA BARK, which has been known to man for centuries for its medicinal properties, was found in 1848 to contain the natural alkaloid, quinidine. Quinidine is the dextrorotatory isomer of quinine, another natural alkaloid of the cinchona group. In 1914,[1] Wenchebach reported the value of quinine in certain cardiac arrhythmias after the chance observation of cessation of atrial fibrillation in one of his patients following the use of quinine. In 1918, von Frey noted that quinidine was more effective in conversion of atrial fibrillation than either quinine or chinchonine. By 1922 quinidine had been used many times for the treatment of atrial fibrillation and a conversion rate of 50 per cent was recorded at that time.

The actions[2] of quinidine on the heart are numerous and have received intensive study. The effect of the vague nerve on the heart is depressed. Vagal stimulation after quinidine may cause no change in heart rate or may result in the paradox of an increase in heart rate. The latter effect is unexplained. The carotid sinus reflex is blocked as well as the action of methacholine. In the normal individual quinidine produces a sinus tachycardia, presumably secondary to vagal depression, and, in toxic amounts, conduction defects and ventricular premature contractions occur. Large doses of quinidine may result in cardiac arrest in the digitalized patient and experimentally it is known that digitalized hearts are more susceptible to quinidine toxicity; conversely, digitalis must be used with caution when large doses of quinidine are being given. High doses tend to cause hypotension, principally due to peripheral vasodilatation. Myocardial irritability and contractility are decreased with resultant reduction in stroke output. Conduction time is increased and a prolonged PR interval is commonly observed. The effective refractory period is prolonged by 50 to 100 per cent. An increase in condition time promotes atrial fibrillation; however, the predominant effect of quinidine is to increase the effective refractory period which stops atrial fibrillation. The threshold to induction of atrial or ventricular fibrillation by electrical stimuli or epinephrine is elevated by moderate doses and lowered by large doses of quinidine. Although varying alterations are found in the electrocardiogram, the primary changes are: prolonged PR interval, broadened QRS, prolonged QT interval and, with toxic doses, defects in the conduction system and ectopic rhythms are observed. The combination of a sinus tachycardia and a slurred QRS, i.e., greater than 50 per cent of the QRS prior to treatment, occurring during treatment has given rise to the term, "pseudoventricular tachycardia."[3] Cessation of therapy is usually indicated with this arrhythmia, but the prognosis is much better than with a ventricular tachycardia.

Experimental evidence suggests that action at the cellular level is as follows: The depressant action of quinidine on myocardial tissue is counteracted *in vitro* by lowering the extracellular potassium level.[4] It is therefore theorized that quinidine decreases permeability of the cell membrane to potassium ions, the transfer of which is involved in contractility. Reduction of the extracellular potassium increases the gradient across the cell membrane allowing normal transfer of ions.

Quinidine can be used for nearly all types of cardiac arrhythmias with the exception of those due to digitalis intoxication. The most important therapeutic uses are in the conversion of atrial fibrillation and ventricular tachycardia to normal sinus rhythms.

ATRIAL FIBRILLATION

Atrial fibrillation may be divided into two types. The acute paroxysmal type which is commonly idiopathic, but may be due to acute infections, hyperthyroidism, marked exertion, alcohol and tobacco usually occurs without evidence of organic heart disease. The chronic type is commonly due to congestive failure resulting from coronary artery disease; however, failure from various other etiologies may cause fibrillation. The high incidence of coronary artery disease with resulting failure explains the frequency of atrial fibrillation due to this condition. Rheumatic mitral valve disease is also a common cause of chronic fibrillation. The immediate mechanism starting the fibrillation appears to be an increased intra-atrial pressure with resulting atrial distension. Two theories exist as to the basic abnormality of atrial fibrillation.[2] The circus movement theory has been in vogue for some 40 years. Factors which tend to stop the circus movement or movements are faster conduction, longer refractory period and shorter pathway followed by the circus impulse. The opposites of these three factors tend to perpetuate the movement. Quinidine slows conduction and increases the refractory period. However, as stated before, the latter action is the predominant of the two so that the net effect makes quinidine an effective drug in the treatment of fibrillation.

The second theory of the basic mechanism of atrial fibrillation which has been advanced during the last five to seven years states that the fibrilla-

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From the University of Missouri Medical School, Columbia. Fourth year medical student.

tion arises not from a circus movement but from a number of rapidly firing ectopic foci in the atrial muscle. At the present time it is not known which of these theories represents the actual situation or indeed if either is the primary mechanism for continuation of the fibrillation.

The pathologic physiology involved is as follows: The atria are essentially in functional diastole, "beating" at about 450 per minute and the ventricles are usually responding in an irregular manner of around 120 per minute. The slower ventricular rate than atrial is explained by many of the atrial impulses arriving when the ventricle is in the refractory period and varying degrees of A-V block are frequently present. The resultant ventricular rate and rhythm changes lead to further slowing of the circulation.[5] The cardiac efficiency, i.e., cardiac work performed relative to the amount of oxygen consumed, is decreased by 15 to 80 per cent, coronary blood flow is decreased by an average of 30 per cent, and the cardiac muscle metabolism is also reduced. The factors noted result in increasing decompensation, which can to some extent be reversed by the use of digitalis. When congestive failure with fibrillation is present the patient should be fully digitalized and then be given quinidine because both the chance of conversion and the dose of quinidine needed are favorably affected. However, it is to be emphasized that the effects of high doses of quinidine and of digitalis when used together are unpredictable and serious myocardial toxicity may result. For this reason quinidine is contraindicated for arrhythmias resulting from digitalis intoxication. The usual therapeutic doses of these two drugs can be used with safety, however.

Before attempting to convert the fibrillating patient, general measures such as correction of electrolyte imbalances, digitalization if indicated, treatment of hyperthyroidism, correction of any nutritional deficiency present, and treatment of any acute infection should be undertaken. The serum quinidine level is a useful guide during therapy as to further dosage, likelihood of conversion, and possibility of toxicity.[6] The indications for conversion may be listed as appearance of atrial fibrillation causing increased severity of failure, chronic cardiac invalids in whom it was thought a sinus rhythm might increase output, episodes of emboli during fibrillation, technically successful mitral valvulotomy, continued fibrillation after treatment of hyperthyroidism, fibrillation of recent origin, i.e., six months or less, and disturbing palpitation and awareness of heart beat despite full digitalization and slow rate. Contraindications include middle aged and elderly patients who are doing well on digitalis without cardiac difficulties or emboli.

Several methods of administering quinidine are in current use. The drug is given orally unless conditions to be described later are present. A test dose of 0.2 grams is given on the first day to test for idiosyncrasy. If no idiosyncrasy, the so-called "fast" method is commonly used which is 0.4 grams every two hours for five doses; if no conversion, then 0.6 grams every two hours for five doses the next day, then if no conversion the same pattern to be followed with 0.8, 1.0 and 1.2 grams. The maximum serum level of quinidine is reached after five doses when giving the drug every two hours; therefore, it is felt that continuing with the same amount of the drug for more than five doses is of little value. The "slow" method is sometimes successful when toxicity is encountered with the "fast" method. In the "slow" method doses of 0.4, 0.8, 1.0 and 1.2 grams are given in that order, four hours apart, over a twelve hour period. Concomitant anticoagulant therapy is not generally used unless there has been a recent embolization. Electrocardiographic monitoring is essential during the course of therapy, both to follow the therapeutic effect and to discover appearance of the toxic effects. Fifteen per cent of conversions occur in a stepwise fashion from fibrillation to flutter to regular sinus rhythm. Toxic effects noted by electrocardiography are QRS widening and premature ventricular contractions. Widening of the QRS interval by more than 50 per cent or frequent ventricular contractions as often as one out of every six normal beats is considered grounds for cessation of therapy. One electrocardiogram daily before the fifth dose is considered sufficient unless signs of toxicity or slowing of the atrial rate are noted, or a daily dose greater than 3 grams is given. If the latter conditions are present an electrocardiogram should be taken before each dose or even more frequently. Frequent questioning and examination should be carried out for toxic signs. Blurred vision, deafness, anorexia, nausea, weakness, vertigo, tinnitus, slight diarrhea and headache are observed with mild toxicity. With moderate toxicity which includes vomiting, diarrhea, hypotension, QRS interval increased 25 to 50 per cent above original, the patient should be watched carefully but therapy may be continued. Marked toxicity including ventricular tachycardia, ventricular fibrillation, frequent extrasystoles and QRS widening of 50 per cent or more is an indication for cessation of therapy. Purpura, fever, rash and hypotension may occur when idiosyncrasy is present.

A conversion attempt should not be considered unsuccessful until the patient has received at least 2 grams of quinidine during one course of the dosage schedules noted previously. The occurrence of myocardial toxicity and/or serum quinidine levels of 8.0 micrograms per ml. indicate therapy should be discontinued. Conversion of atrial fibrillation can occasionally be achieved by the use of procainamide after quinidine has failed.

Determination of the serum level of quinidine is important because the occurrence of atrial fibrillation conversion and of toxic effects is related to the serum level of quinidine more directly than to the dosage. A wide range of serum levels has been recorded with the same dosage in different individuals. The average serum level at the time of conversion for the series to be reported was 6.1 micrograms per ml. The quinidine serum level generally necessary to prevent relapses was 5.0 micrograms per ml. Serum quinidine levels above 6.0 micrograms per ml. resulted in increasing frequency of toxicity reactions although occasional toxic effects were noted below 6.0 micrograms per ml. Serum quinidine levels of 8.0 micrograms per ml. or above resulted in frequent toxic effects and the incidence of conversion declined markedly.

Plasma quinidine concentration may be rapidly and precisely obtained by a procedure originally developed for quinine.[7] The plasma proteins are precipitated by adding metaphosphoric acid to a diluted plasma specimen. The quinidine in the filtrate is fluorescent when an ultraviolet light is passed through the filtrate and the concentration of quinidine can then be determined with a photofluorometer. The procedure is readily adaptable to the clinical laboratory.

The results of a recently reported series[8] reveal that 153 conversions occurred in 177 patients during 214 trials. The average dose at time of conversion was 2.2 grams per day. Toxicity increased rapidly and per cent conversions decreased above serum levels of 8.0 micrograms per ml. Relapses occurred in 36 of 42 patients in whom quinidine was discontinued shortly after conversion. With a maintenance dose less than 1.6 grams per day 19 of 42 patients relapsed. With a maintenance dose greater than 1.6 grams per day 9 of 34 patients relapsed. In this series of 177 patients, one embolus occurred in a patient who had had a previous embolus and one questionable embolus occurred in a patient without history of a previous embolus. In another series of 418 conversions two emboli occurred at the time of the conversion. This is not considered a significantly higher emboli incidence than in those patients who are fibrillating and are not converted. Sudden death has been reported to occur in from 1 to 2 per cent of patients during the course of quinidine therapy.

VENTRICULAR TACHYCARDIA

Paroxysmal ventricular tachycardia often presents as an emergency situation and usually indicates serious myocardial disease.[9] Conversion to a sinus rhythm with quinidine may be life saving. If immediate action is not taken cardiac asystole, ventricular fibrillation or cardiac failure may ensue. Intravenous quinidine is preferred to oral quinidine because of the rapidity of action, close control of the amount given, and the injection can be stopped at the first sign of toxicity or when regular rhythm is achieved. It is worth noting that after giving 0.6 grams quinidine orally in one dose a peak blood level of 3.2 micrograms per ml. is reached in 135 minutes, after 0.65 grams of quinidine given intramuscularly a peak serum level of 2.68 micrograms per ml. is reached in 140 minutes,[10] and after intravenous quinidine the peak level is reached immediately and maximum effect from the quinidine follows in 15 to 30 minutes. Occasionally following intravenous administration therapeutic and/or toxic effects may not reach a peak for 60 to 90 minutes. For intravenous administration 0.8 grams of quinidine gluconate diluted to 20 ml. with isotonic saline solution is prepared. This is injected slowly at a steady rate no greater than 65 mgm. per min. Frequent toxic symptoms appear with injection rates above 130 mgm. per min. A continuous electrocardiogram should be taken during the injection and the blood pressure should be taken every 30 seconds. The results in 28 attacks treated in this manner reveal 24 immediate conversions, two delayed conversions (several hours after treatment), two failures and one death which was not necessarily due to quinidine. High maintenance doses[3] are often required to prevent recurring acute arrhythmias, i.e., 1.6 to 3.2 grams a day in four divided doses which give a serum quinidine level of from 4 to 5 micrograms per ml.

OTHER INDICATIONS

Atrial flutter has been converted successfully to a regular sinus rhythm in from 20 to 30 per cent of conversion attempts.[11] Danger lies in the ventricles responding to each atrial beat instead of a 2:1 or 3:1 atrioventricular block which was present before treatment. It may be advantageous to convert the flutter to fibrillation with digitalis and then convert the fibrillation to a regular sinus rhythm with quinidine.

Paroxysmal supraventricular tachycardias can be restored to a normal sinus rhythm with quinidine used in doses of 0.4 to 0.6 grams every two to three hours until relieved. Maintenance quinidine may be required. Sino-atrial tachycardias will not respond to quinidine, however.

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Case Reports

Guillain-Barre Syndrome

Complicating Acute Hepatitis, Treated Successfully With Prednisone

DANIEL AKS, M.D., AND DAVID R. CHILES, M.D., *Smithville*

GUILLAIN-BARRE syndrome is an acute disorder of the peripheral nervous system manifested by sensory and motor loss and radicular pain. The onset of the illness is usually rather sudden and unexpected, preceded by a mild upper respiratory infection. The clinical picture most frequently is characterized by muscle weakness progressing to paralysis and various paresthesias, hyperesthesias and anesthesias unaccompanied by evidence of a toxic or septic disease process. Radicular pain associated with severe muscle tenderness is frequently present. Mental symptoms are conspicuously absent. A most characteristic finding in this syndrome is the so-called albuminous-cytologic dissociation present in the spinal fluid (the cell count is nearly always normal while the protein is elevated).

A degenerative process is seen histologically, characterized by patchy degeneration of myelin sheaths and axis cylinders and infiltration with various inflammatory cells. Changes consisting of edema, vacuolization and pyknosis of cells also have been described in dorsal root ganglion, anterior horn cells, posterior column and dorsal spinocerebellar tracts.

Guillain-Barre syndrome is a rare accompaniment of acute hepatitis, there being only five previous reported cases and this case is, apparently, the first one occurring three weeks after the clinical onset of acute hepatitis.

CASE REPORT

R. J., a 14 year old white male, was admitted to the Smithville Community Hospital on March 4, 1958, with the chief complaint of right mid abdominal pain associated with nausea and loss of appetite and general weakness. The pain, which was intermittent in character, sharp in quality, with radiation to the left side of the abdomen in its mid-portion, had been present for approximately 48 hours prior to admission. The patient had a normal bowel movement on the day preceding admission and his activity, prior to the onset of his chief complaints, was unrestricted.

Past History.—This young male had been in good general health prior to the onset of his present illness, sustaining the usual childhood diseases without sequelae. Birth and development had been normal.

Family History.—There was no evidence of any chronic or familial type disease.

Systemic Review.—The patient denied any change in bowel habits. There was no history of dark urine, light colored stools, hematemesis or melena, exposure to toxic agents or recent blood or plasma transfusions or injections of any kind.

Physical Examination.—A well nourished, well developed, 14 year old, white male was in obvious discomfort from abdominal pain. Blood pressure was 110/70, pulse 74 and regular and respirations 20. Temperature was 99.4 F.

Neck.—Thyroid was not enlarged. There was no significant cervical adenopathy. Neck was supple.

Chest.—Percussion and auscultation were normal. The point of maximum impulse was at the left midclavicular line in the 5th intercostal space. The cardiac tones were normal. The rhythm was regular sinus. There were no murmurs heard.

Abdomen.—A palpable liver edge was three fingers breadth below the right costal margin in the midclavicular line which was smooth and moderately tender. The splenic tip was palpable two fingers breadth below the left costal margin which was also slightly tender. The right midabdomen was tender to palpation with some muscle guarding but no definite rigidity. There were no herniae demonstrable.

External Genitalia and Rectal.—Findings were within normal limits.

Back and Extremities.—Peripheral pulses were full and palpable throughout. There was a full range of motion of all joints with no evidence of muscle atrophy.

Neurologic.—Cranial nerves were intact, sensory modalities normal, no gross muscle weakness. The deep tendon reflexes were equal and active bilaterally.

Laboratory.—Urinalysis revealed a straw colored urine; reaction, acid; specific gravity, 1.025; negative for albumin; negative for sugar; negative for bile. Microscopic examination showed 2 to 3 pus cells. Red blood count was 6,100,000, hemoglobin, 15.8 grams, white count, 7,900 with a differential of 55 segments, 14 stabs, 24 lymphocytes and 7 monocytes. Blood sugar was 109 mg. per cent. Creatinine was 1.76 mg. per cent. Blood urea nitrogen was 16.7 mg. per cent. Sedimentation rate was 20 mm. in 60 minutes. Hematocrit was 48, blood cholesterol, 155 mg. per cent. Bromsulphalein retention point was 5 per cent in 30 minutes. Cephalin cholesterol flocculation, 24 hours, was 3 plus; 48 hours, 4 plus. Total protein was 6.7 mg. per cent, albumin was 4.6 mg. per cent, globulin, 2.10 mg. per cent with a ratio of 2.09/1. Heterophile was negative. Icteric index was 6.1 units and prothrombin time was 46.5 per cent.

A tentative diagnosis of acute hepatitis, anicteric type, was made.

Flat plate of the abdomen was interpreted as within normal limits. X-ray examination of the chest was within normal limits. Electrocardiogram was interpreted as normal.

Intravenous pyelograms revealed good functioning of both kidneys with normal pelves and calyceal outline. Phenolsulfonphthalein was normal.

On March 8, three days after admission, a liver biopsy was performed with a Vim Silverman needle in which 1 cm. of liver tissue was obtained. Histologic pathology showed focal areas of small liver cells, some showing evidence of regeneration; many showing acute necrosis with secondary infiltration with polymorphonuclear leukocytes. Histologic diagnosis was acute hepatitis.

The patient was treated supportively with a high vitamin, high protein diet. Heterophiles on four occasions were negative. Repeat cephalin flocculation, one and two weeks after admission, revealed 3 plus cephalin flocculation. Bromsulphalein remained normal as did the bilirubin. Thymol turbidity was within normal limits. The patient continued to complain of intermittent bouts of abdominal pain. Three weeks after admission the patient had a sudden onset of bilateral leg weakness with symmetrical paresthesia of the lower extremities and inability to urinate. Examination revealed severe muscle weakness of the lower extremities, bilateral and equal, with hypesthesia extending up to just below the umbilicus and loss of position and vibratory sensation. Deep tendon reflexes were diminished bilaterally. A lumbar puncture was performed which revealed normal manometrics; cell count, 3; differential, 2 lymphocytes, 1 polymorphonuclear leukocyte; protein, 46 mg. per cent (normal, 18 to 35). Gram stain of the sediment was negative. Spinal fluid sugar was 82 mg. per cent.

Patient was unable to void and was catheterized and 600 cc. of clear colored urine were obtained and a Foley catheter was left in place. Patient continued to complain of moderately severe abdominal pain, requiring medication for relief. Urinary uroporphyrin and porphobilinogen were run on several occasions which were negative. The paralysis, within 48 hours, was noted to extend up to the lower intercostal region at the level of T8 with hypesthesia extending up to the costal margin. The patient at this time was completely unable to move his lower extremities and rectal examination revealed loss of sphincter tone. Deep tendon reflexes were absent. A repeat lumbar puncture was performed which revealed an increasing spinal fluid protein of 54.5 mg. per cent; cell count, 2 lymphocytes; VDRL, negative; sugar, normal; Gram stain, negative.

The patient was started on Prednisone, 10 mg., initially, and 5 mg. every 6 hours thereafter. On the sixth postparalytic day, the sensory level was regained over the lower chest and abdomen and testicular sensitivity had returned. On the seventh postparalytic day, the patient was able to move his lower extremities to some degree and on the eighth postparalytic day, deep tendon reflexes had also returned to normal. The patient had grossly normal muscle function and normal sensation. Liver function tests revealed a 2 plus, 48 hours, cephalin flocculation. Patient's appetite improved. Spontaneous urination was re-established without difficulty.

Steroids were slowly withdrawn in small decreasing amounts and, on April 4, all liver function studies were within normal limits. Physical examination was essentially normal except for persistent one finger splenic enlargement, which was not tender. The liver was no longer felt and the patient was dismissed in April, 33 days after admission to the hospital and 16 days after the onset of his paralysis.

The patient has subsequently been followed in the Clinic. Repeated physical examination and liver function tests revealed no abnormality. Two months after dismissal, there is no clinical enlargement of liver or spleen and laboratory function studies are all within normal limits. The neurologic examination is entirely normal.

DISCUSSION

The etiology of the Guillain-Barre syndrome remains obscure. Stillman and Ganong postulated the neuropathy due to a hypersensitivity reaction. In the case reported, improvement was noted five days after commencement of steroid therapy and almost complete return to normal two days thereafter. The neuropathy occurring three weeks after onset of acute hepatitis, and the dramatic recovery while receiving steroids, suggest a hypersensitivity phenomenon. However, no definite conclusions can be drawn from this one case.

Smithville Clinic

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GRANTS FOR STUDY OF LEUKEMIA

The Leukemia Guild of Missouri and Illinois has announced that it has available approximately $100,000 for grants on July 1 for investigative work in blood dyscrasias. Requests for application blanks should be sent to Mr. Ralph Shower, Executive Director, Leukemia Guild of Missouri and Illinois, 4530 Forest Park Blvd., St. Louis 8, prior to March 15.

Giant Ovarian Cyst

Report of a Successful Intact Removal

LOUIS P. HETLAGE, M.D., AND PAUL T. BERRY, M.D., *Troy*

THIS TUMOR weighed 48½ pounds and is believed to be the largest mass of its type to be removed intact in this state. In the last fifty years, the vast improvement in anesthesia and surgical technic, with an increased confidence in surgery, has all but eliminated the finding of massive benign lesions within the peritoneal cavity. The increasing awareness of the benefits to be derived from regular physical examination, particularly pelvic examination, and the greater availability of free clinic service in indigent areas, have led to the early diagnosis and treatment of ovarian masses. The few cases which have been reported in recent years[1, 2, 3] can, therefore, be regarded more for their curiosity value than for any great fundamental basic principles which could be gained from their management.

CASE REPORT

Mrs. A. S., aged 68, Negro female, was first seen in this office on August 14, 1958, complaining of shortness of breath, particularly inability to sleep in bed because of pressure from her abdomen. History was vague, but apparently she had been rather obese for many years, with a protuberant abdomen. In the last year she had begun to lose weight, with a decreasing appetite, but without gastrointestinal or genitourinary symptoms. As she lost weight her abdomen, either relatively or actually, began to enlarge, eventually taking on the typical pedunculated appearance of a space-occupying intra-abdominal mass (fig. 1). She had increasing symptoms of postural dyspnea, back pain and vaginal pressure, and at times needed a crude sling to permit ambulation. She was entirely unaware of her tumor, feeling that she was "just overeating."

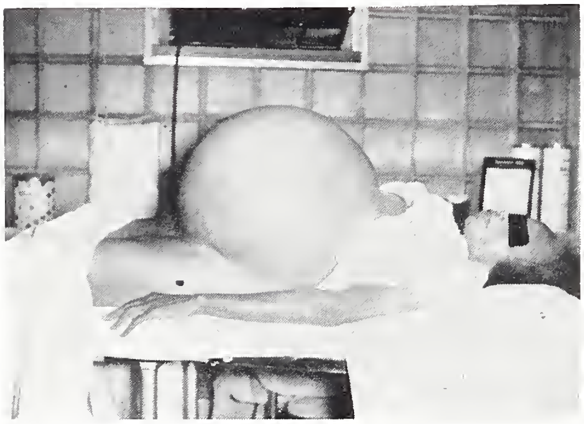

Fig. 1. Patient had massive abdominal distension.

On physical examination, massive abdominal distension was noted, with a distinct fluid wave. A large abdominal tumor, occupying the entire space from xyphoid to pubis, was best definable by ballottment through a large volume of ascites. Pelvic examination revealed distension of the anterior and posterior fornix, and the mass seemed attached to the left lateral pelvic wall. There were distant breath sounds, the diaphragms being extremely high to percussion, and immobile. The Patient was advised to enter the hospital for workup, but she refused. No treatment was given.

She was admitted four weeks later as an emergency because of severe shortness of breath. At the time of admission the abdomen had become more tense, probably from increase in ascites. She was started on nasal oxygen, and several hours later careful paracentesis was done, avoiding the tumor mass. Over 4,800 cc. of brown fluid was removed, which effectively relieved her dyspnea. Admission workup revealed the following: white blood count 7,200, Hb. 8.4, Micro Hct. 33 per cent, normal differential, urine specific gravity 1.018, albumin 2 plus, sugar negative, WBC 8-10, RBC 0-2; nonprotein nitrogen 67, FBS 129, proteins 6.75, A 3.30, G 3.45. Chest film was clear, but only three interspaces showed on either side. The heart was elevated to a high horizontal position. Cell block of ascitic fluid revealed a class 1 smear with no evidence of malignancy.

The patient was started on antibiotics. She received four units of whole blood prior to surgery, and the preoperative count showed Hb. 12 gms., Hct. 43 per cent. Routine preparation and enemas were done on the morning of surgery and a Foley catheter was inserted, as was a Levine tube.

With induction under local, pentothal, and anectine, an endotracheal tube of suitable size was inserted, and the patient carried on cyclopropane and nitrous oxide with a high percentage of oxygen. A 2 inch midline incision was made below the umbilicus. Exploration revealed a thick walled cystic mass, apparently arising from the left adenexa, filling the entire peritoneal cavity with attachments only to the bladder anteriorly, sigmoid colon posteriorly, and omentum superiorly. It ascended into the lower two-thirds of the thoracic cage displacing liver and both diaphragms upward. The majority of small and large bowel lay in the left upper quadrant, and appeared entirely normal. There was no evidence of metastatic tumor in the liver or nodes, and no indication of peritoneal implants. The incision was extended from the xyphoid to the symphysis, and transversely across the rectus muscles at their mid-portion. After division of the omental adhesions, the mass was delivered from under the diaphragms. Immediately there was a drop in blood pressure corrected by increasing the flow of blood, the administration of intravenous Vasoxyl, and Wyamine Sulfate. Pulse and respiration remained constant. The mass was then freed of adherent viscera. In so doing the sigmoid, which was densely adherent to the mass, was inadvertently opened. Since no bowel preparation had been used, it was decided not to attempt repair; therefore, through a separate left lower quadrant incision, it was brought out in a double barrel colostomy. The pedicle contained many large vessels of the infundibulo-pelvic ligament, and the left ureter. There was no difficulty in ligating the larger vessels, and dissecting the mass free of the great vessels and ureter. No attempt was made to control the oozing present, or to reperitonealize the area as the patient suddenly went into an unexplainable fibrillation controlled during closure with intravenous Cedilanid .8 mgm. The abdomen was rapidly closed with No. 28 stainless steel wire and continuous silk. Two lateral drains were used. A tight pressure dressing was applied and the patient placed in oxygen, as a prophylactic measure.

The cyst, intact, weighed 48½ pounds. It measured 34 by 38 by 25 cm. (fig. 2), was roughly loculated, and had a tough fiberous capsule. It contained a yellowish chocolate fluid and in one area there were numerous smaller cysts within the cavity, filled with gelatinous grey material. Microscopic report, pseudomucinous cystadenoma with hemorrhagic changes.

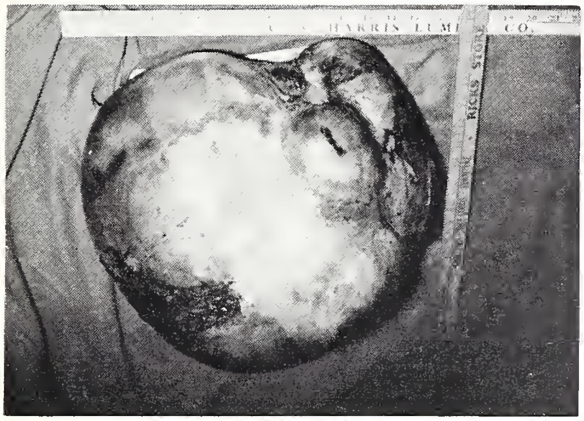

Fig. 2. The removed cyst weighed 48½ pounds.

Postoperative course was entirely benign. The patient was given another .4 mg. of Cedilanid six hours after surgery but required no further digitalis. She was maintained on the usual intravenous fluids and showed no tendency toward shock or respiratory difficulties in the immediate postoperative period. No blood or vasopressors were used. Bowel sounds returned at 36 hours and the tube was removed. The colostomy was opened at 48 hours and liquid feedings begun. Ambulation was started on the third day at which time the patient remarked that it was "sure good to see my feet again." Drains were removed on the sixth day, sutures on the seventh day, and she was discharged fully ambulatory, on the eight day.

She has continued to do well. Her appetite is good and she has gained five pounds in two weeks. We plan to readmit her in six weeks for closure of the colostomy. It is of interest that she developed ascites to a minor degree in the first week, but has apparently developed none since. The wound, which was at least 40 cm. long and 20 cm. wide, rapidly decreased to 17 by 9 cm. in the first seven days. The rectus muscles regained their tone at about the rate expected following the delivery of a child. The abdominal wall, while the skin remains wrinkled, is almost normal to palpation with a minimum of diastasis (figs. 3 and 4).

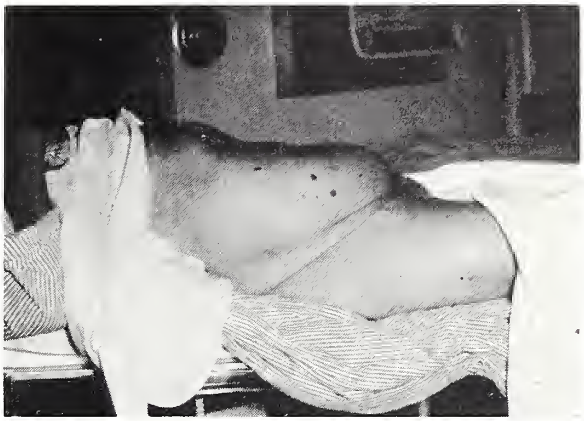

Fig. 3. The skin remained wrinkled but abdominal wall was almost normal to palpation.

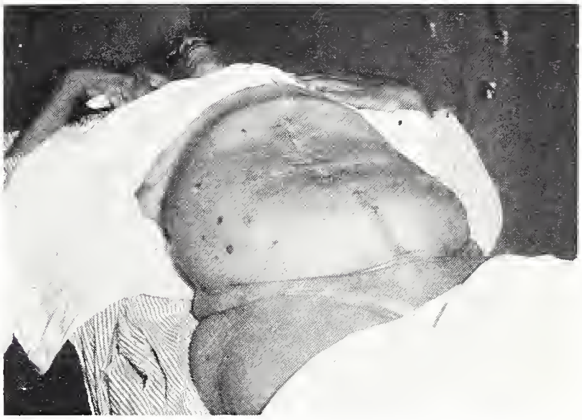

Fig. 4. The wound was approximately 40 cm. long.

DISCUSSION

Nothing in the management of this case is out of the ordinary except that the size of the mass created quite a problem, both in anesthesia and in technic. Undoubtedly such masses cannot be removed without an extremely competent anesthetist. Endotracheal anesthesia is certainly a vital factor in the control of respiratory volume. We feel that there must have been more than 1,000 cc. increase in vital capacity upon delivery of the mass. If proper oxygenation were not established prior to this, the change would have been similar to those noted upon tracheotomy, where a sudden drop in CO_2 is sometimes fatal. Prompt recognition of pulse and pressure changes are of extreme importance. Only by having the patient under complete and constant control can these masses be removed intact.

We feel that extending the incision transversely to form a cross greatly facilitated removal and shortened operating time. At no time was retraction necessary. It did not seem to affect wound integrity in the least. We have had previous experience with combined longitudinal and transverse incisions, mainly longitudinal right rectus with transverse left rectus in an inverted "L." These have been used mostly for gastrectomy and splenectomy. The outstanding feature has been unsurpassed exposure for a two man team, requiring a minimum of retraction, even in extremely obese patients. We have had no instances of wound weakness.

Papers on similar cysts seem to indicate the advisability of transperitoneal paracentesis of these large cysts.[4, 5, 6] It seems to us that if the proper anesthesia is available, and if the condition of the patient justifies surgery at all, that every attempt should be made to remove it intact. It is virtually impossible to identify the nature of the cyst prior to exploration. The danger of seeding a serous cystadenoma or pseudomucinous cystadenoma (as in this case), or even an ovarian carcinoma is great. The risk of a fatal hemorrhage (this mass had some vessels 1 cm. in diameter coursing across the anterior surface) seems to be greater than the risk of sudden decompression. However we do feel that partial decompression can be obtained by withdrawing at least part of the ascites, which is an almost constant finding in these cases.

A case is reported by Nixon and Wichern[5] in which there was no hope of immediate intervention and drainage was necessary. Clay and Cabot report the subsequent implantation of ovarian carcinoma after surgical drainage.[6]

Decompression on the operating table is at times necessary for the removal of a widely adherent tumor.[2] In that instance the obvious advantages of controlled paracentesis and isolation of the field are available.

CONCLUSION

The successful removal of pseudomucinous cystadenoma of the left ovary weighing 48½ pounds has been described.

The importance of competency in anesthesia and particularly endotracheal anesthesia has been discussed.

We feel that the preoperative transperitoneal aspiration of these cysts adds materially to the risk of spreading tumor implants and causing hemorrhage and that, as a routine, it should be discouraged.

370 E. Wood St.

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AMERICAN COLLEGE OF SURGEONS TO MEET IN ST. LOUIS

More than 3,500 surgeons, nurses and related medical personnel are expected to attend a four-day sectional meeting of the American College of Surgeons in St. Louis, March 9 through 12, 1959. Headquarters will be the Kiel Auditorium, with many sessions scheduled also in leading St. Louis hospitals.

This four-day meeting, like the annual Clinical Congress, is designed to inform the medical profession at large about developments in surgery, and to focus attention on newer ways of handling problems encountered in daily practice. The program will include hospital clinics, panel discussions, symposia, scientific papers, technical exhibits, medical motion pictures and cine clinics in general surgery and in the specialties of thoracic surgery, urology, gynecology and obstetrics, opthalmic surgery and orthopedic surgery.

Frank McDowell, M.D., St. Louis, associate clinical professor of surgery, Washington University School of Medicine, is chairman of the local advisory committee on arrangements for the scientific program. Miss Joyce Brueggeman, assistant professor of nursing, Washington University School of Nursing, is chairman of the nurses' advisory and planning committee.

Assisting Dr. McDowell on local arrangements are the following Fellows of the College: Drs. Eugene M. Bricker, James Barrett Brown, James B. Coston, Charles R. Doyle, Heinz E. Haffner, C. Rollins Hanlon, Carl A. Moyer, Leo V. Mulligan, John W. Stewart, and Franklin E. Walton.

Chairmen of the specialty programs are Drs. Thomas H. Burford (thoracic surgery), Grayson Carroll (urology), E. Lee Dorset (gynecology and obstetrics), Robert D. Mattis (opthalmic surgery), Fred C. Reynolds (orthopedic surgery) and Henry G. Schwartz (neurological surgery).

Hospital clinics have been arranged by staff representatives in leading St. Louis hospitals. Participating hospitals and representatives are Barnes Hospital Group (Justin J. Cordonnier, M.D.), Jewish Hospital (Morton D. Pareira, M.D.), St. Louis City Hospital (C. Alan McAfee, M.D.), St. Louis University Hospitals (James Eugene Lewis, Jr., M.D.), St. Luke's Hospital (Carl E. Lischer, M.D.), Veterans Administration Hospital (Falls B. Hershey, M.D.).

DR. ARNESON HONORED

The Alumni Association of the St. Louis College of Pharmacy and Allied Sciences of St. Louis will present an annual award for distinguished service to A. N. Arneson, M.D., St. Louis at a meeting the later part of February.

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Special Article

Mental Health

Building Foundations for Missouri's New Program

ADDISON M. DUVAL, M.D., *Washington, D. C.*

THE BASIC AIMS of a state mental health program are (1) to provide modern care and treatment to the state's mentally ill where this is not provided by local community facilities, and (2) to establish a preventive plan to forestall the development of mental illness.

Many different types and kinds of services and facilities are necessary if a broad program of psychiatric treatment is to be established in the state.

These are first divided into private and public treatment services depending somewhat on the citizens' ability to pay the costs, although in some states the public treatment services may equal the private services except for individual psychotherapy. Certainly private hospitals, private nursing homes and the private office practice of psychiatry should be available to those who prefer and can afford it financially.

The broad spectrum of public psychiatric services should usually include the following:

1. Psychiatric services in public general hospitals.
2. Community psychiatric clinics.
3. Resident treatment centers for children.
4. Nursing homes.
5. Facilities for chronic alcoholics (nonpsychotic).
6. Facilities for narcotic addicts (nonpsychotic).
7. Facilities for delinquent children.
8. Consultative services to juvenile and adult courts, jails and prisons.
9. Consultative services to public schools.
10. Schools for the mentally retarded and epileptic.
11. State mental hospitals.

Time is not available to discuss all of these elements of a mental health program and I will discuss briefly only ways and means of establishing improved standards of care and treatment in state institutions.

THE HOSPITAL PROGRAM REQUIREMENTS

A good mental hospital program can be developed if the following provisions are made:

1. Qualified staff is provided in the amount necessary to treat each patient and to provide supportive nonmedical services.
2. The tools of treatment are provided to the staff including medications, equipment, community rehabilitation services and laws which are unrestrictive of good treatment.
3. Hospital buildings, grounds and maintenance services are provided on a level in keeping with other state operations.
4. An educational program is established (1) to keep the citizens abreast of conditions in the mental health field and (2) to carry on a continuous in-service training of staff.
5. Clinical research is encouraged.
6. Responsibility for leadership and control of the hospital is vested in a superintendent who is both a qualified psychiatrist and an experienced able administrator capable of developing a truly therapeutic climate in the hospital.
7. A central divisional or departmental office is established with both the authority and the responsibility to operate an integrated mental health program for the entire state, with the assistance of an advisory board or commission. The director of such office should be a highly qualified psychiatrist and administrator capable of establishing an operating climate in the state which will attract professional personnel.

PLANS FOR IMPROVEMENT

Mental hospital programs usually are divided into short-term and long-term plans. In Missouri, the long-term plans should await careful evaluation of needs by the Division Director and his staff in cooperation with the superintendents of the hospitals, other state officials and various community groups both professional and non-professional. When such plans are complete, they can then be presented to the Governor, the Mental Health Commission, the people of the state and the General Assembly for final action.

It seems obvious that short-term planning should receive first attention while long-term plans are being formulated. Present deficiencies in the state hospitals are so alarming that emergency corrective measures are indicated.

The first great need is for improvement of the hospital professional staff in the various disciplines, in both quantity and quality. Psychiatrists, clinical psychologists, social workers, graduate nurses and activity therapists are all in scarce supply both locally and nationally. Some of these people can be obtained, however, if salaries are

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Director, Missouri Divison of Mental Diseases, effective April 3, 1959.

Presented before the St. Louis Society of Neurology and Psychiatry, St. Louis, October 27, 1958.

competitive and a stimulating work climate is established which includes teaching and research. An active, efficient recruitment program which tells the story of Missouri's determination to march forward in mental health will be a first necessity to success.

The second great need will be to improve the efficiency of present hospital management operations. The lack of over-all integration and correlation of the operations of the hospitals and schools has resulted in each dedicated superintendent and his staff trying to "go it alone." Such plan is, of course, highly inefficient as well as confusing to the state officials, the General Assembly and the people. Immediate steps to integrate and correlate all institutional management operations, both medically and administratively should greatly improve this unfortunate situation. Modern management methods with centralized statistical controls will point the way to improved economy in operations even in an expanding program for these state institutions.

Each institution will, therefore, be subjected to a most careful and detailed operations evaluation in both medical and administrative areas. The answers to many questions must be found. Why are the institutions so much overcrowded? Are proper types of patients being admitted? Are case loads properly estimated and projected into operating budgets? Are the geographical areas served by the institutions properly established? Should some hospitals be designated to serve special needs as for tuberculosis patients or alcoholic patients, as is the practice with the so-called criminal insane? Should entirely new services for geriatric patients be established at community levels so these patients would not have to be subjected to commitment to a state hospital as insane? Can overcrowding be reduced by the development of family-care or boarding-out programs which have been so successful elsewhere? Why have recruitment programs for professional staff failed in the past in Missouri? Are patients being kept in the state institutions only because they are "good workers" and cannot be spared for this reason? Is the climate of the institution too restrictive for good treatment? Is it restrictive because the community does not understand and simply thinks all mental patients need to be locked up for the sake of safety? Does the hospital have good management at all levels? Does it have efficient programs of purchasing, warehousing, general maintenance, personnel control, job evaluation, salary schedules, performance standards or incentive awards? Is there an adequate employee health program? Are volunteers utilized to the best advantage and in sufficient numbers? What attention is given to the potential growth of employees in preparation for promotion to more responsible jobs?

These questions are but examples of the need for adequate study of present operations so that defects may be corrected and improvement in efficiency may result. Taxpayers of the state have a right to expect maximum economy of operations as they consider dollar needs for expansion and improvement in the mental health program of Missouri.

The third great need is to develop new methods which will help to solve the problem of the increasing numbers of state hospital patients who—as treatment failures—are permitted to stay on indefinitely as chronic patients. The patients are both young and old but the aged group is sharply on the increase.

There now seems little doubt but that the creating of extended dependency habits in these patients serves to increase their invalidism to the point at which they not only lose their urge to leave the hospital but also fear the responsibility of normal family and community life.

Ways of preventing such invalidism must be found. A part of the problem lies in the attitude of the hospital staff toward newly admitted patients. We act as if all patients will be long-term patients instead of the reverse. Our antiquated commitment laws seem to say the patient is being "put away" for good! I believe we should tell the relatives who bring the patient to the hospital that we expect the patient will need to stay only a short time for treatment and then return home. By this specific attitude the patient's hope is kept up and also the separation of the family from the patient and his problem is prevented. I believe that mental hospitals should emphasize immediate rehabilitation rather than chronic invalidism. Many patients can live in the community rather than in the hospital even if they are not fully recovered if the way for this to happen is prepared. What a help this would be to the overcrowded state hospitals! But it has to be carefully worked out as a part of a broad program of mental health.

Another way to help solve this problem is to develop nursing homes and family boarding arrangements for certain patients, young or old, whose families cannot arrange to accept their care in the home. Such plans can be aided in some cases by the use of Social Security payments to these patients. In some instances matching federal funds can be obtained to help defray costs. In addition, the development of outpatient clinic services for these patients will help in keeping them out of mental hospitals. Also, the number of new patients now admitted to mental hospitals can be reduced by the development of such clinics. These clinics should be staffed either directly by the Division of Mental Diseases or through monetary support by state funds to the cities or counties on a matching basis. Some states have found this plan to be very feasible and practical as well as economical. These are but examples of the possibilities, which must be worked out.

The fourth great need and possibly the most urgent is the need to establish treatment centers for mentally ill children. In Missouri, the juvenile court law seems to have gotten ahead of the development of clinical psychiatric services for children, with resulting confusion and dissatisfaction on the part of all concerned. It would appear that the Division of Mental Diseases has a clear mandate to develop some services for psychotic children in the state hospitals, and these might naturally be located in St. Louis, Fulton and Kansas City, in close proximity to medical school faculties with their specialists in child psychiatry who could hopefully serve as consultants to the service.

There are disadvantages in placing treatment services for psychotic children in adult mental hospitals but the alternate plan of establishing an entirely new mental hospital for children in a separate location would probably be prohibitive from the cost standpoint at the present time in view of all the other improvements which are also urgent.

In addition to facilities for psychotic children there needs to be developed additional residential treatment centers for emotionally disturbed children who are not psychotic. Responsibility for such centers might be assumed by a city, by one or more counties, by a medical school, or by a private group or foundation.

Much careful thought and consideration should be given to the development and establishment of psychiatric services for children at both state and local levels, so that there will be no duplication of effort or costly mistakes in planning.

Preceding consideration and evaluation of improving the functions of the state hospitals and the development of new programs had to come the careful planning and establishment of a central office staff for the Division of Mental Diseases. This work has been proceeding since my selection as Director in March 1958, to be on the job in April 1959. In the interim I am serving in an advisory capacity to the Mental Health Commission and the Department of Health and Welfare, and have proceeded slowly and carefully to develop the program and the organization of the Central Office staff, together with the budget plans necessary to implement the program. The Personnel Division has been especially cooperative and helpful in the difficult work of establishing entirely new types of positions in the Merit System which the program required, and the Mental Health Commission and the Governor have given consistent and sound advice and counsel. Without such help my efforts would have been futile.

The Central Office organization is beginning to take on specific form and shape. The top assistants to the Director will be a Deputy Director and a Chief of Hospital Administrative Services. The Deputy Director will assist the Director in the over-all supervision and operation of the Division and will also supervise and correlate the work of the several consultants to the Director in such disciplines as psychology, nursing, social work, education and research and activity therapy. We are happy to have secured the services of Dr. Louis Belinson—former Superintendent of Jacksonville (Illinois) State Hospital—as Deputy Director, effective September 22, 1958. The Chief of Hospital Administrative Services will supervise and direct the work of the Division in management and administrative areas such as budget, personnel, engineering, farm, purchasing, repairs and replacements and statistical control.

The consultants will give leadership and supervision in the development of their own treatment disciplines in the several institutions of the state so that an over-all integrated program will result. They will also keep in close touch with their own professional society in the state as well as with the colleges and university groups so that the Division's training and recruitment needs in their special discipline may receive continuing attention and consideration. This should materially assist in the problem of securing well-trained personnel in adequate numbers.

But all this is not enough if an outstanding program of mental health in Missouri is to be developed. It will be essential that a work climate in the Division of Mental Diseases be developed in which professional people of all disciplines will be proud to be a part. In my experience it is a basic truth that money alone will not attract the best professional staff. A good salary is required but it is also necessary to provide modern equipment, good inter-disciplinary communications and relationships, in-service and out-service educational opportunities, participation in program planning and a chance both to teach and to do some clinical research. Hospital and preventive programs must be broadly planned and eclectic. The Division Director must dare to take calculated risks for his program, his staff, the patients and the state. He must be willing to share his problems with the community through the channels of the press, radio and television and by keeping hospital doors open to citizens.

After the operations analyses of the state institutions are completed and improvements are under way, then work can begin on other aspects of the mental health program. These were outlined earlier in this report. The most urgent might be the expansion of out-patient clinics, the development of education and training for the several professional disciplines in cooperation with colleges and universities, the start on a coordinated research program, the clarification of the legal responsibilities in mental health on the part of the cities, the counties and the state, and the review and modernization of laws relating to the mentally ill.

Slowly the full program will come into being through the work of many hands. We must build on a firm foundation and for the long haul rather than the short haul. More money will be needed to do the job well but Missouri has the income to support a sound mental health program devoid of frills. The people of this state are basically conservative and will expect their dollars to be well spent and I am wholly in accord with such philosophy.

Added to all this must be the earned confidence in the Division of Mental Diseases and the full support which can be given by the State Medical Association, the county medical societies, the branches of the American Psychiatric Association, the medical schools, other professional groups, and the local and state Associations of Mental Health.

Missouri has indeed embarked on a crusade. This is a crusade to promote better mental health for all the citizens of the state. Success can come only if the people of the state desire it and they will desire it only if they are provided with the facts necessary to their decision and the leadership to get the job done well. Therefore, each worker in the field of psychiatry has a responsibility in this crusade. We have a responsibility to ourselves and to our state but we have even a greater responsibility to the mentally ill of Missouri in the present and in the future. To us has been given these grave responsibilities. We cannot avoid them. We will not shirk them. Let us dedicate ourselves to this end.

St. Elizabeth Hospital

MANUAL WILL HELP CUT PAPER WORK

A guide to aid physicians in the use of the new simplified claim forms for accident and health insurance policies issued by insurance companies was mailed in January to all members of the Missouri State Medical Association.

The pamphlet entitled "Simplified Claim Forms" has been published by the Health Insurance Council (HIC). It describes the principles of the HIC program to reduce paper work for doctors and at the same time provide insurance firms with the medical information they need.

The standardized claim forms were developed by HIC in cooperation with the American Medical Association. The House of Delegates of MSMA also endorsed the forms at the 1958 annual session.

Replacing a great variety of claim forms from hundreds of companies, the HIC forms consist of two basic attending physician's statements, one for group accident and health insurance, and the other for individual and family health policies.

The forms comprise a standard set of questions, in a standard sequence, which are the minimum required to meet the requirements of most insurance companies. Some questions and phrases are optional and are not used by some companies.

In addition to the two basic forms, there are four abbreviated forms to be used for surgical and continuing disability statements for group and individual insurance respectively.

The HIC said a growing number of insurance companies across the country have adopted the simplified claim forms and others have made definite plans to do so. The manual is being distributed to physicians so they will be aware of the effort to reduce their paper work load.

REGULATIONS OF RETURN AND RESALE OF DRUGS AND MEDICINES

To effect control of returned drugs and medicines, the Division of Health has caused to be filed with the Secretary of State, the following regulations:

This action as deemed necessary as a protection to the public, and the regulations will have the effect of law after December 1, 1958.

1. No person shall return drugs or medicines to any drug store, pharmacy, or other retail or wholesale outlet, or shall offer for resale any such drug or medicine, which has been removed from the point of original purchase, and in any manner subjected to conditions which might cause contamination, deterioration, or in any way affect the intended therapeutic value of the drug or medicine, except as provided in paragraph 2 of these regulations.

2. A physician, licensed to practice in the State of Missouri, may cause any of the above items to be returned and resold by supplying the purchaser with an affidavit of purity and quality, prepared on his letterhead or prescription blank, and signed by him, and covering only those drugs or medicines originally purchased on his order.

3. The existence of an affidavit of purity and quality, signed by a licensed physician, need not bind any pharmacist, wholesaler, or retailer of drugs or medicines to accept returned goods if he has reason to suspect contamination, deterioration, or affected therapeutic value of the article in question.

In accordance with powers granted under Sections 192.020 and 196.045, Revised Statutes of Missouri, 1949 and Cumulative Supplement, 1957 and as required by Section 536.020 (2), Revised Statutes of Missouri, 1959 and by Article IV, Section 16, Constitution of the State of Missouri, the above regulations were filed with the Secretary of State of Missouri on November 21, 1958.

President's Page

The 1959 Annual Session will be the first one after the first hundred. It will be the 101st Annual Session. The program that has been arranged by the Committee on Scientific and Postgraduate Work promises to start off well the second hundred years of Annual Sessions. The committee has attempted to take the best from other sessions and incorporate all into a well rounded program. It will include presentations by outstanding guest speakers, instruction courses, panels, a clinical pathologic conference on a mystery case, presentations by members of the Association and programs by special societies, all covering a wide variety of fields in medicine. The preliminary program appears on page 184.

The entire session will be held in Hotel Muehlebach rather than in the Municipal Auditorium as in former years. It is felt that having the House of Delegates, reference and special committee meetings and the scientific sessions all in the hotel will be of benefit to the whole meeting. Technical exhibits will also be in Hotel Muehlebach.

The session will open with the House of Delegates meeting in the Colonial Room of Hotel Muehlebach on Sunday, April 5, at 1:30 p.m. Reference committee meetings will follow immediately. The House will meet again on Monday afternoon at 4:30 p.m. and will hold its final session on Wednesday, April 8, at 1:30 p.m. Scientific sessions will take up the rest of the time of the four day meeting.

Make your reservations early for April 5, 6, 7, 8, at Hotel Muehlebach, Kansas City.

EDITORIALS

More Doctors Is Federal Aim

Following blunt warnings to the medical profession last fall, the federal government obviously has decided to see to it that more persons are trained as physicians.

One step in this direction was the recent appointment by Surgeon General Leroy E. Burney of a 21-man consultant group to look into the problem. While Dr. Burney did not specifically outline the scope of the group's activity, he did emphasize that he did not want "just another study" of medical manpower. He also told his consultants in no uncertain terms that whether there is now an absolute or relative shortage of physicians, the need for physicians will increase in the immediate future.

The anticipated shortage expected by Dr. Burney takes into account the desire of the Eisenhower administration to send abroad more and more medical care as a weapon in the cold war. Russia and the United States are vying to bring better medical care to backward nations as part of their global strategy to woo political support. On this point, the health chief said:

FEARS RUSSIANS ARE AHEAD

"The Russians can afford to export their brand of medicine and public health on a much more liberal basis than we in the United States have been able to do up to now. This handicap is another indication of present urgent need."

And another comment by Dr. Burney before the American College of Surgeons is typical of pressures the medical profession is experiencing from all sides. Dr. Burney said: "In the complex society of today . . . health and educational services can no more be left to chance or exclusively to local initiative than can the development of heavy industry, consumer goods, transportation, public utilities and national defense."

This logic also is advanced by social planners and others who think and talk in terms of bigness —big government, big business and big labor.

HEALTH CHIEF BLAMES DOCTORS

Dr. Burney also took his brother physicians to task for having "adopted negative attitudes in solving social problems when a positive attitude and leadership were needed."

With his words, doubtless, still fresh in their memories, his newly-named consultants authorized two staff projects at their first meeting: a study of financing medical school operations, and a study of construction costs of medical schools.

The group also named a steering committee and set a second meeting for this month. Named to the 5-man steering committee was Dr. Edward L. Turner, secretary of the Council on Medical Education and Hospitals of the American Medical Association.

A report of that council adopted by the A.M.A. House of Delegates at the recent interim session in Minneapolis, however, shows that the medical profession is aware of the problem.

The report urges starting new 4-year medical schools and increasing the enrollment at existing medical schools—whenever and wherever feasible. It also urges the development of more 2-year programs of basic medical science.

ATTACK A FALSE CLICHÉ

In strong words, the report also takes issue with the fallacious statement heard all too often that physicians keep the supply of doctors down to keep their fees high. The report:

"Statistical information has at times been taken out of context and interpreted to the effect that the official position of the American Medical Association is that there is no need for increased number of physicians. No such official position has ever been enunciated. American medicine fully recognizes the needs being brought about by the increasing population, social and economic trends, and the changing dimensions of medical knowledge and its application. The primary concern of American medicine is that these needs be carefully analyzed and that they be met as a result of sound developments based on the best possible knowledge."

The Council on Medical Education and Hospitals also pointed out in its report to the House that in the "rapidly changing modern scene" it has become virtually impossible to determine just what the relative ratio of physicians to total population should be.

PHYSICIANS STILL TO LEAD

Through the adoption of the council's report, the House of Delegates re-affirmed that American physicians and the AMA would continue their leadership in the field of medical education.

And, judging from the studies being undertaken by Dr. Burney's consultant group, the medical profession is going to have to make one decision soon. It will be: how much, if any, federal financing of medical schools does it favor.

On this subject another federal agency, the National Institute of Health, already is surveying 20 representative schools to learn how government research grants affect the schools as a whole.

The schools, of course, also have to make up their minds on how much federal money and its unavoidable accompanying controls they want to accept. Theirs also is not an easy decision to reach because as one school official put it: "We either accept more federal money or more paying patients, or close our doors."

Charles R. Doyle, M.D.

Musings of the Field Secretary

"Go West Young Man, Go West." That will be the song of the Council on Rural Health of the American Medical Association, at least until after March 7, 1959. This admonition is now generated because of the staging of the Fourteenth National Conference on Rural Health at the Broadview Hotel in Wichita, Kansas, on March 5, 6, 7, 1959. This well-known annual "spot-light on rural health problems" is sponsored by the A.M.A. Council on Rural Health together with state medical associations, farm, educational and allied organizations. The general theme this year is "Horizons in Rural Health." A number of outstanding presentations by nationally known speakers will highlight the conference. Special emphasis is being centered on such important subjects as mental health, problems of the aging, nutrition, dental health, the costs of medical care and the various aspects of health insurance. Discussion periods are also planned on these topics and ample time will be devoted to audience participation at each session. Registration will open at 8:00 a.m. on March 5 with the first session at 10:00 a.m. There is no registration fee. The conference will close at noon on March 7.

I have a feeling that the members of the Kansas Medical Society will appreciate the presence of their medical cohorts from Missouri at this rural health conflab.

The Missouri Health Council in cooperation with the Nemours Foundation of Delaware will sponsor a state-wide conference on the handicapped in Missouri on Friday and Saturday, April 3, 4, 1959, at Hotel President, Kansas City. This is a follow-up of the conference last June in St. Louis which was somewhat general in nature. This second conference has selected the topic "Help for the Multiple Handicapped in Missouri." This will include consideration of both children and adults. An added feature of this 1959 conference is the inclusion of mobile clinical tours on Friday afternoon, April 3, to some of the service agencies in Kansas City where the actual services are being rendered to the multiple handicapped. Outstanding authorities on the handicapped are being invited to appear on the program of this two-day session. The Nemours Foundation was established under the will of Alfred I. du Pont twenty-three years ago and is devoted to aiding the discussion, planning and operation of better methods and practices in treatment and rehabilitation of crippled children.

It is hoped that many physicians over the state will arrange to take off a few days early for attending the Annual Meeting of the Missouri State Medical Association in Kansas City, April 5-8, 1959, and participate in, at least, a part of the April 3 and 4 conference on "Help for the Multiple Handicapped in Missouri."

Someone just directed to me the question "Where do we get the necessary qualified personnel to staff the many new hospital additions and new hospitals recently completed, under construction and contemplated?" I need help in answering this one.

At present there are a number of good medical practice locations in Missouri, outside of the metropolitan areas, that someone is overlooking for some specious reason. In trying to determine the "Why" of this I am reminded of Conwell's "Acres of Diamonds."

MEDICAL EDUCATION CONGRESS TO MEET

Specialism in medicine and the role of research in medical education will be the main discussion topics during the 55th annual Congress on Medical Education and Licensure February 7-10 in Chicago.

The Congress is sponsored by the American Medical Association's Council on Medical Education and Hospitals, the Advisory Board for Medical Specialties, and the Federation of State Medical Boards of the United States. It will be held at the Palmer House and will be attended by medical educators, hospital administrators, government officials and others interested in medical education.

"The rising prevalence of specialism in medicine is associated with many problems in education and in the way medicine is practiced," Dr. Edward L. Turner, secretary of the A.M.A. Council, said. "It is being discussed at the meeting with the hope of clarifying some of the problems and finding new approaches to education and training both specialism and general practice."

The Congress will open Saturday with the third annual examination institute held by the Federation of State Medical Boards of the United States.

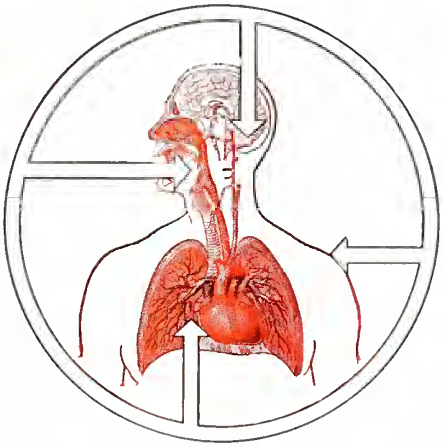
On Sunday morning, the general areas of discussion will be outlined, including specialism in modern society; specialism in medicine; trends in specialism, and the relation of specialism to "the pursuit of excellence."

Sunday afternoon will be devoted to workshop sessions at which specialism in graduate clinical training will be considered from the standpoint of the residency program, the specialty board, the resident and the hospital. The workshop conclusions will be reported and discussed at a general session Monday afternoon.

The role of research in the education of all physicians will be discussed Monday morning.

Tuesday morning will be devoted to a discussion by the federation of some major factors involved in reconstructing the medical curriculum.

Now—All cold symptoms can be controlled



Provides Triaminic for more complete and more effective relief from nasal and paranasal congestion because of systemic transport to *all* respiratory membranes—without drawbacks of topical therapy.†

Provides well-tolerated APAP (N-acetyl-p-aminophenol) for prompt and effective analgesic and antipyretic action to make the patient more comfortable.

Provides Dormethan (brand of dextromethorphan HBr) for non-narcotic antitussive action on the cough reflex center in the medulla—as effective as codeine but without codeine's drawbacks.

Provides terpin hydrate, classic expectorant to thin inspissated mucus and help the patient clear the respiratory passages.

†Lhotka, F. M.: Illinois M. J. 112:259 (Dec.) 1957. Fabricant, N. D.: E. E. N. T. Monthly 37:460 (July) 1958. Farmer, D. F.: Clin. Med. 5:1183 (Sept.) 1958.

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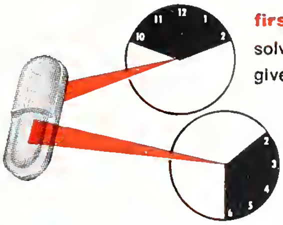

first—the outer layer dissolves within minutes to give 3 to 4 hours of relief

then—the inner core releases its ingredients to sustain relief for 3 to 4 more hours

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Each TUSSAGESIC tablet provides:

TRIAMINIC®	50 mg.
(phenylpropanolamine HCl	25 mg.
pheniramine maleate	12.5 mg.
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Dormethan (brand of dextromethorphan HBr)	30 mg
Terpin hydrate	180 mg.
APAP (N-acetyl-p-aminophenol)	325 mg.

Dosage: One tablet in the morning, midafternoon and in the evening, if needed.

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News

E. J. Senn, M.D., Herculaneum, was honored by a surprise reception, November 15, sponsored by a large number of his patients and associates. Eight hundred persons were present for the affair.

"Hypnosis as Used by Your Physician and Dentist" was the subject of talks by **Melvin M. Schwartz**, M.D., St. Louis, and Robert S. Simon, D.D.S., St. Louis, on November 22 in Temple Shaare Emeth, University City.

John J. Hammond, M.D., St. Louis, assistant professor of clinical medicine at the St. Louis University School of Medicine, has been appointed chief of the medical department at St. John's Hospital.

Wendell G. Scott, M.D., St. Louis, was the main speaker at the second program in a series on "Scientific Advancement" given by the science section of the Wednesday Club of St. Louis on November 19.

Arthur E. Strauss, M.D., former president of the St. Louis Heart Association, has been named to the American Heart Association's committee on awards.

Shelby B. Hughes, M.D., Clinton, has been appointed as one of the 15 State Commission members of the Civil War Centennial Commission by Governor James T. Blair.

The appointment of **Kenneth K. Keown**, M.D., Columbia, professor of anesthesiology at the University of Missouri, to the honorary medical staff of the Independence Sanitarium and Hospital was announced on December 5.

George E. Thoma, M.D., St. Louis, director of the radioisotope laboratories at the St. Louis University School of Medicine, has been named editor of the *Journal of the Society of Nuclear Medicine,* a new publication.

"Liver Disease" was the subject of a talk given by **Charles F. Bahn**, M.D., Cape Girardeau, on December 17 in the auditorium of the VA Hospital in Poplar Bluff.

Walter S. Sewell, M.D., Springfield, was named in a recent edition of *Who's Who in America.* Dr. Sewell, who is president of the state board of medical examiners and past president of the Missouri State Medical Association, has been in *Who's Who in the Midwest* for the past ten years.

"Don't be overly concerned with what happened yesterday or might happen tomorrow." This was one of eight suggestions for a healthy way to meet the pressures of modern business made by **Joseph C. Edwards**, M.D., St. Louis, in a speech before the Downtown St. Louis Kiwanis Club at Hotel Sheraton-Jefferson, December 11.

Samuel T. Brownfield, M.D., retired Brookfield physician, was honored in special ceremony December 23 by Brookfield Lodge No. 86, A.F. and A.M., when he was presented with a 50-year pin in recognition of his half century membership.

Edwin C. Ernst, M.D., Kirkwood, recently took part in the Inter-American Congress medical convention in Lima, Peru.

NEW MEMBERS

Bivings, F. Gary, M.D., 13 Faculty Lane, St. Louis 5. St. Louis Medical Society.

Brittingham, Thomas E., M.D., 6242 Waterman Ave., St. Louis 5. St. Louis Medical Society.

Karsh, Robert S., M.D., 7311 Amherst St., St. Louis 5. St. Louis County Medical Society.

Kovac, Albert P., M.D., 2510 E. Vivion Rd., North Kansas City. Clay County Medical Society.

Loitman, Bernard, M.D., 100 N. Euclid Ave., St. Louis 8. St. Louis Medical Society.

Lonsway, Maurice J., Jr., M.D., 8225 Clayton Rd., St. Louis 17. St. Louis Medical Society.

Morris, Earl F., M.D., State Hospital No. 3, Nevada. West Central County Medical Society.

Reider, Richard A., M.D., 3449 Hereford Ave., St. Louis 9. St. Louis Medical Society.

Shaya, Ezra A., M.D., 5535 Delmar Blvd., St. Louis 12. St. Louis Medical Society.

Spratt, John S., Jr., M.D., 4359 West Pine Blvd., St. Louis 8. St. Louis Medical Society.

Taylor, J. E., M.D., Pleasant Hill. West Central County Medical Society.

Ternberg, Jessie L., M.D., 264 Plaza Dr., St. Louis 12. St. Louis Medical Society.

Timpton, Richard H., M.D., 4743 Easton Ave., St. Louis 13. St. Louis Medical Society.

Witt, Frederick W., M.D., 5400 Arsenal St., St. Louis 9. St. Louis Medical Society.

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Councilor District News

FIRST COUNCILOR DISTRICT

DONALD M. DOWELL, CHILLICOTHE, COUNCILOR

Grand River Medical Society

Dr. Dowell presented a plaque to Dr. Grace, retiring president.

Officers were seated at the head table.

The Grand River Medical Society met December 11, 1958, at the Strand Hotel in Chillicothe for the annual Christmas party. Dr. C. L. Clark, chairman of the program committee, was in charge. He was assisted by Mrs. C. L. Clark, Mrs. E. W. Allen, Mrs. R. W. Bohnsack, Mrs. E. L. Bales, Miss Brown, Mrs. V. D. Vandiver and others. The room and tables were beautifully decorated. Christmas carols and songs were sung. There was an attendance of 60 members, Auxiliary members and guests. Among the guests was Field Secretary Raymond McIntyre.

After a fine turkey dinner the program continued. A nice talk was given by Mr. McIntyre. The outgoing President, Dr. C. M. Grace, introduced the incoming President, Dr. E. W. Allen. Our Councilor, Dr. D. M. Dowell, made an appropriate talk and presented President Dr. Grace a beautiful plaque. Several lovely prizes were awarded. This was a joyous occasion and everyone seemed to enjoy it.

E. A. Duffy, M.D., *Secretary*

SECOND COUNCILOR DISTRICT

B. L. MURPHY, HANNIBAL, COUNCILOR

Chariton-Macon-Monroe-Randolph County Medical Society

The annual dinner meeting of the Chariton-Macon-Monroe-Randolph County Medical Society for the members and their wives and other guests was held at the Country Club in Moberly on Thursday night, December 11.

The featured speaker at the meeting was The Reverend Leon Hill, author, lecturer and Baptist minister of Amarillo, Texas. His topic was "Keeping Sane in a Mad World." His rapid fire humor, which carried through the entire talk, kept his audience fully amused.

Dr. W. D. Chute, retiring president, presided, and welcomed the guests and introduced the speaker.

Dr. Carl C. Weger, Keytesville, was introduced as the new president of the society along with Dr. H. S. Miller of Macon, vice president and Dr. Josephine Baker, Moberly, the new secretary-treasurer.

Robert H. Young, M.D., *Secretary*

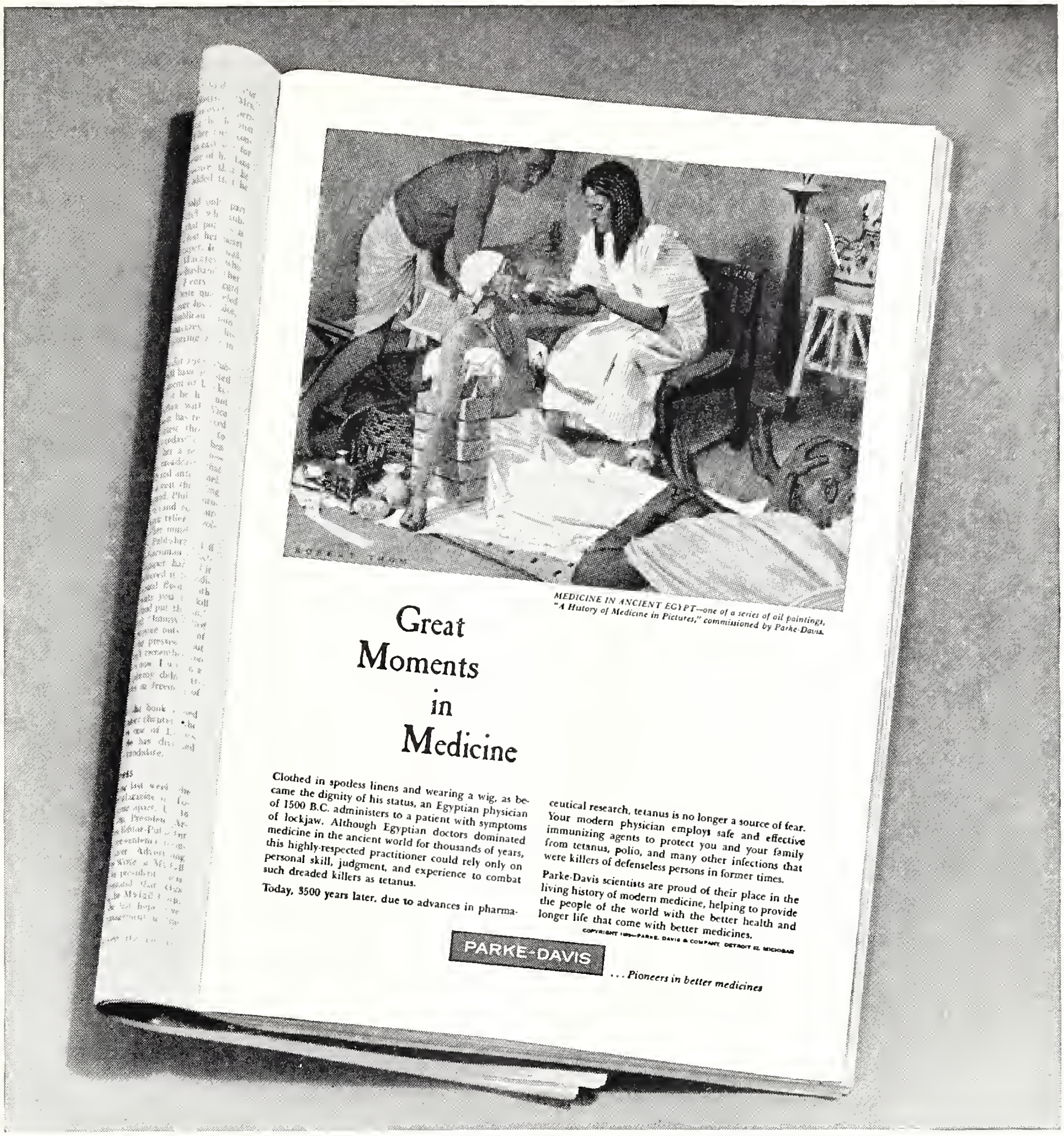
FOURTH COUNCILOR DISTRICT

JOSEPH C. CREECH, TROY, COUNCILOR

Jefferson County Medical Society

The Jefferson County Medical Society held its monthly meeting at the Jefferson Memorial Hospital on Tuesday night, December 9, following a hospital staff meeting. Dr. Karl McKinstry, president, presided. Other doctors present were: Drs. Allbee, Bolgar, R. H. Donnell, Kozal, Mayfield, Rice, Rutledge and Senn.

Note was taken of the recent death of one of the retired members, Dr. T. B. Edwards, who formerly practiced in Cedar Hill. His son, Dr. W. B. Edwards, Kirkwood, is still a member of the society. It was moved by Dr. Senn and seconded by Dr. Mayfield that the Society send money to St. Joseph's Hill Infirmary, at Eureka, as a memorial to Dr. Edwards instead of sending flowers. The motion carried.



MEDICINE IN ANCIENT EGYPT—one of a series of oil paintings, "A History of Medicine in Pictures," commissioned by Parke-Davis.

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The president stated that he had been contacted by the Jefferson County Cancer Society asking for approval of their educational campaign. It was moved by Dr. Senn and seconded by Dr. Mayfield that the Society go on record as heartily approving the educational program of the Cancer Society. The motion carried.

Officers for the coming year were elected as follows: President, Dr. R. H. Donnell; Vice President, Dr. Harry Yoskit; Secretary-Treasurer, Dr. John F. Rutledge; Delegate, Dr. Frank L. Kozal; Alternate Delegate, Dr. J. L. Mayfield.

JOHN F. RUTLEDGE, M.D., *Secretary*

Lincoln-St. Charles County Medical Society

A dinner meeting of the Lincoln-St. Charles County Medical Society was held Tuesday, December 9, at the Southern Air Restaurant in Wentzville. The most important feature of this meeting was the presence of the doctors' wives.

The evening's festivities began with a social hour followed by dinner and an informal program. It seemed to be an occasion enjoyed by all of those present and attendance was good.

PAUL ROTHER, M.D., *Secretary*

FIFTH COUNCILOR DISTRICT

BRYON M. STUART, BOONVILLE, COUNCILOR

Audrain County Medical Society

The Audrain County Medical Society held a joint dinner meeting with the Audrain Hospital medical staff, Thursday night, December 11, 1958, at the Audrain Hospital.

The meeting was called to order by the president, Dr. Leonard L. Davis.

The minutes and treasurer's report of the previous meeting were read.

The Society voted and accepted Dr. Gordon Shaw as an associate member. The rights and privileges of an associate member were read and discussed as designated in the Constitution and By-Laws of the Missouri State Medical Association, on page 4, Section B.

New officers elected for 1959 were: President, Harold D. Lankford, M.D.; vice president, Lawrence K. Epple, M.D.; secretary-treasurer, Ernest S. Gantt, M.D.; delegate, Harold D. Lankford, M.D.; alternate, Benjamin N. Jolly, M.D.; board of censors, Charles L. Garcia, M.D.

The following doctors were present: Drs. Leonard L. Davis, Thomas L. Dwyer, Kathryn C. Epple, Lawrence K. Epple, Charles L. Garcia, J. Frank Jolley, Benjamin N. Jolly, William H. Jolly, Glen P. Kallenbach, Harold D. Lankford, Harry F. O'Brien, Ned D. Rodes and Ed S. Wallace.

There being no further business, the meeting was adjourned.

HAROLD D. LANKFORD, M.D., *Secretary*

EIGHTH COUNCILOR DISTRICT

W. W. TILLMAN, COUNCILOR, SPRINGFIELD

Green County Medical Society

The regular November meeting of the Greene County Medical Society was held Friday, November 28, 1958, at the Kentwood Arms Hotel. There were 47 doctors and 15 wives present.

The meeting was called to order by the President, Dr. Elkins, who expressed the Society's appreciation to Dr. C. Souter Smith for hosting the members of the Society at a reception in her home.

The Eighth District Councilor, Dr. Walter W. Tillman, was next introduced and he introduced the evening's speaker, Mr. Eddie Bass, public relations consultant of Springfield, who spoke on "The Industrial and Structural Development of Springfield." On completion of his address, Mr. Bass received a warm round of applause.

The president then declared the business portion of the meeting in session and asked for corrections or approval of the minutes of the October meeting as published in the *Bulletin*. On a motion by Dr. Anthony, seconded by Dr. Kenneth Knabb, the minutes were approved as published.

In the absence of Dr. E. H. Rainwater, Mr. Galbraith, executive director, read the nominating committee's report to the membership.

The report was as follows: For the office of President-Elect, Dr. Walter W. Tillman; for the office of secretary, Dr. G. Bruce Lemmon; for the office of treasurer, Dr. Paul C. Morton; to fill the two vacancies existing on the Council of the Medical Society, Drs. Harry Silsby and John P. Ferguson. To serve in the House of Delegates, Dr. Stanley Peterson, Dr. John P. Ferguson, Dr. Kenneth Knabb; as alternate delegates, Dr. Don F. Gose, Dr. F. T. H'Doubler, Jr., and Dr. Arch Lowe, Jr. To serve as elected members of the nominating committee next year, Drs. Jerry H. Allen, M. D. Bonebrake and R. C. Conrad. Following the reading of this report the President announced to the general membership that nominations were now open to the floor. There being none the nominating committee's nominations were held in order and will be carried over to the December regular meeting at which time there will be a vote.

The floor was next granted to Dr. Stanley S. Peterson who spoke in behalf of Dr. Frank Maple, chairman of the constitution and by-laws committee. Dr. Peterson read the following report.

"Members in arrears for the current year shall after January 31 forfeit the right to vote and to

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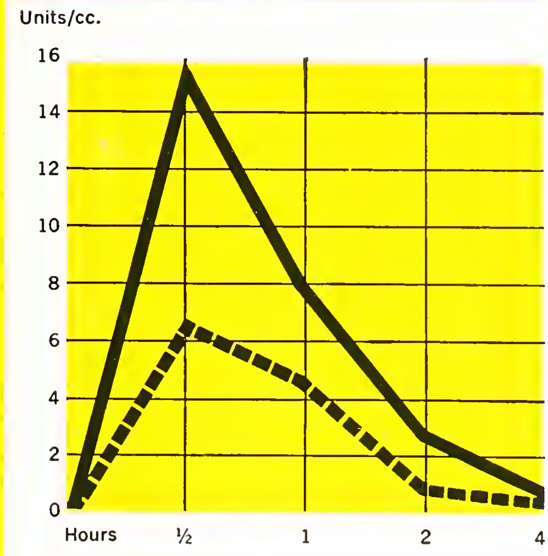

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Note the high upper levels and averages at ½ hour, and at 1 hour.

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hold office. Any member in arrears on March 31 shall be dropped automatically from the roll. The Council may in cases of prolonged illness or for any other serious cause adjust the dues of the member."

Upon completion of this report President Elkins informed the membership that this proposal would be held over for one month and be put to a final vote at the December business meeting.

An excerpt from the November Council meeting minutes was called to the general membership's attention with regard to a $10.00 dues increase. It was further explained that for the last two years there has been an assessment levied. There is no anticipation of an assessment needed for the coming year and therefore if a dues increase is effected it would not increase the amount paid over and above the last two years. Complete details were explained to the membership and they were informed that this matter would be held over for final vote at the December business meeting. It was then announced that the general membership will be sent prior to the December business meeting a treasurer's report and an accounting for all of the Society's expenses including the annual installation, the 100th annual Missouri State Session, the 11th annual golf tournament and the income and expenses of the sale of records to date.

A call for further new business was made and Dr. Anthony asked and received the floor. Dr. Anthony moved that the constitution be suspended and by-laws waived in order that the December regular meeting could be held on the third Friday of the month rather than the fourth Friday of the month which is the day after Christmas. This motion was seconded by Dr. M. D. Bonebrake and unanimously passed by the general membership.

There being no further new business the President declared the meeting adjourned.

G. Bruce Lemmon, Jr., M.D., *Secretary*

Jasper County Medical Society

A regular meeting of the Jasper County Medical Society was held on December 9, 1958, at Twin Hills Golf and Country Club, Joplin.

The meeting was called to order by the president, Robert E. Kirschman, M.D. Forty members were present.

Upon motion duly made and carried the minutes of the last regular meeting of the Society were approved as read.

Reports of the following committees were made:

Blood Bank Committee: Dr. David Allen, chairman, stated that it worked a hardship on him for a member to cancel his appointment for service on the Blood Bank a few hours before the time set for such service.

Dr. Alice Wilson suggested that members be notified, if possible, a month in advance of the day and time for service at the Blood Bank so that such time for service could be scheduled as part of regular office routine.

Tri-State Medical Bulletin Committee: Dr. S. W. Scorse announced that he would resign as editor of the *Tri-State Medical Bulletin*, effective January 1, 1959. The president announced that Dr. Sandor D. Papp had been appointed by the Council as editor to serve until the next election of officers.

The president read a letter from Dr. Ron Laney praising the *Bulletin*.

Telephone Listing Committee: Dr. Irwin Craig, chairman, announced that the telephone listing committee was submitting its report at the next meeting of the council and that numbers would be furnished all members at that time.

Dr. Sam Grantham thanked the Society for the flowers, cards and expressions of kindness extended him by the members.

Dr. S. W. Scorse announced that Mr. Dave Elman would conduct a course in medical hypnosis which would be available on January 30, 1959.

The meeting was then turned over to the program chairman. Dr. John W. Koehler introduced the speaker of the evening, Dr. Edward Massey, St. Louis, whose topic was "Recent Aspects in the Management of Coronary Artery Disease."

A discussion period followed Dr. Massey's lecture.

John W. Koehler, M.D., *Secretary*

Ozarks Medical Society

The Ozarks Medical Society held its December meeting on December 9, as guests of the Missouri State Sanatorium, Mount Vernon. Forty members and auxiliary members enjoyed a turkey dinner.

At the scientific meeting which followed in the staff conference room at the sanatorium, Dr. Lewis Yates and Dr. H. V. Langeluttig presented newer findings and aspects of diagnosis and treatment of histoplasmosis. Note was made of fine exhibit of pathology of histoplasmosis, which had won an award of merit at the AMA convention and which was presented by Dr. Henry Sweany.

A short business meeting followed, after which election of officers took place. Dr. Leo T. Taylor, Neosho, was elected president; vice president, Dr. Henry Sweany, Mount Vernon, and Dr. A. J. Graves was reelected secretary-treasurer. Delegates to the state meeting were elected as follows: Lawrence County, delegate, K. Glover, alternate, A. J. Graves; Barry County, delegate, M. J. Newman, alternate, C. H. Price; Stone County, delegate, F. L. Wommack, alternate, A. P. Capetti; Christian County, delegate, S. Roper; Newton County, delegate, M. C. Bowman, alternate, C. W. Blankenship; McDonald County, delegate, J. J. Royce; Taney County, delegate, J. M. Threadgill, alternate, J. D. Bennett.

The Society voted to waive the meeting on Tuesday night, March 10, 1959, so that members

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A. J. Graves, M.D., *Secretary*

NINTH COUNCILOR DISTRICT

J. H. SUMMERS, LEBANON, COUNCILOR

Mid-Missouri Medical Society

A buffet dinner was served.

The December Christmas meeting of the Mid-Missouri Medical Society and the doctors' wives was held at the beautiful home of Dr. and Mrs. E. A. Stricker, St. James, on Thursday night, December 18.

The festivities on this gala occasion began with a social hour at 7:00 p.m. followed by a buffet dinner which was "fit for a king." The hickory smoked turkey was a treat to be long remembered. It was quite evident that no one left this party hungry.

Following the feast Dr. James Butts, president of the Society, called a short business session for the purpose of electing officers for 1959. The nominating committee composed of Drs. Stricker, Summers and Bass submitted the following slate of candidates which was elected unanimously with no further nominations: President, Dr. Howard Carrington, Lebanon; secretary, Dr. M. K. Underwood, Rolla. Delegates were elected as follows: Phelps County, delegate, Drs. W. R. Lytle, alternate, J. D. Butts; Dent County, delegate, B. J. Bass, alternate, M. Hart; Crawford County, delegate, F. A. Elders, alternate, A. R. Bauman; Pulaski County, delegate, C. Miller; Laclede County, delegate, H. Carrington, alternate, R. Froelich.

Guests were seated at small tables.

After the business session the evening consisted of cards, listening to music and conversation. Some thirty doctors and their wives were present to enjoy this pleasant occasion.

Cards and conversation followed the dinner.

The Society is most grateful to Dr. and Mrs. Stricker for their courtesy and hospitality in having the Christmas meeting in their home. It was also a pleasure to have a number of physicians and their wives from Ft. Leonard Wood.

M. K. Underwood, M.D., *Secretary*

TENTH COUNCILOR DISTRICT

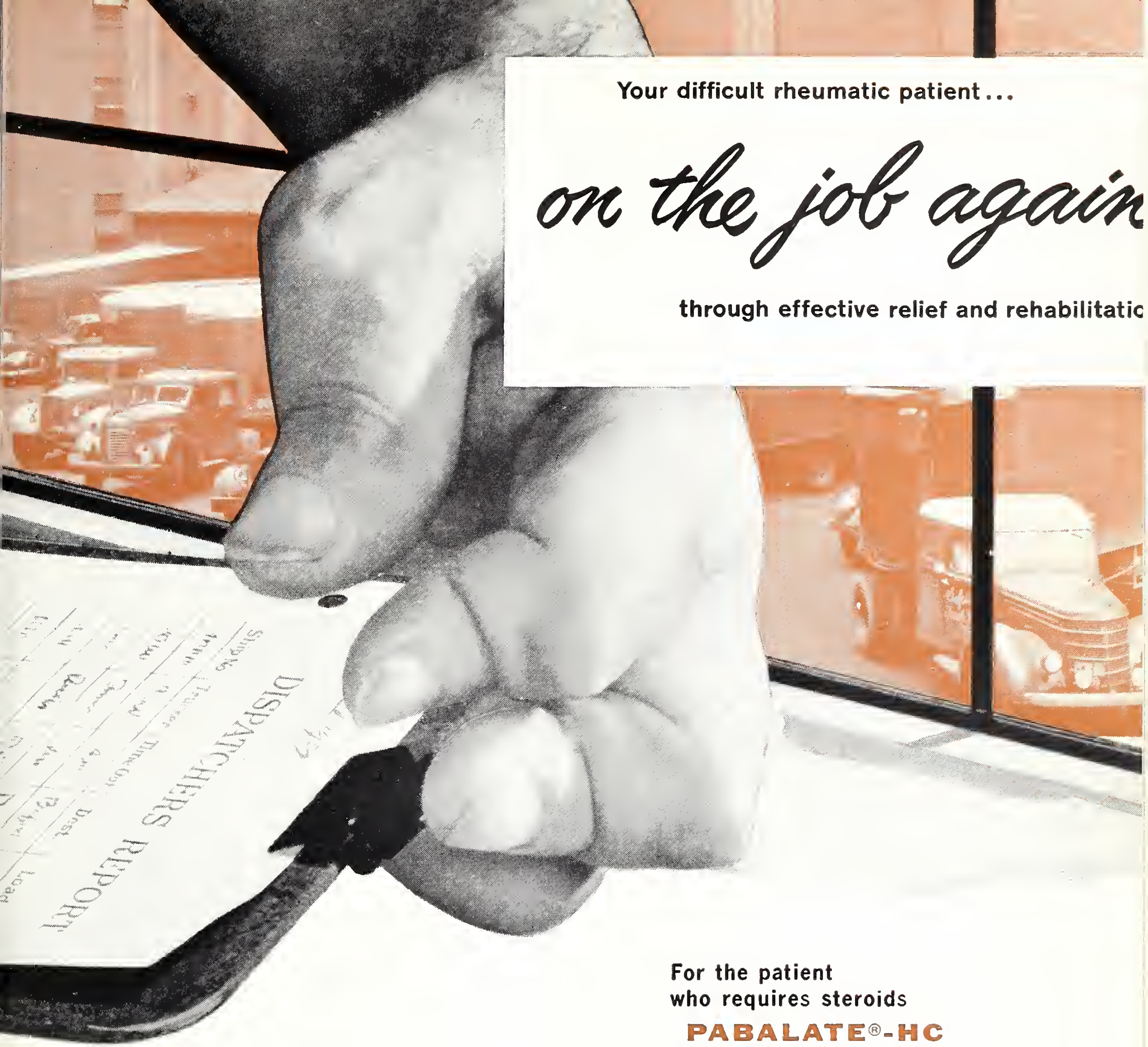
BEN M. BULL, IRONTON, COUNCILOR

Mineral Area County Medical Society

Jack Barrow, M.D., Department of Internal Medicine, Washington University School of Medicine, St. Louis, spoke at a meeting of the Mineral Area County Medical Society on Thursday night, December 18, at the State Hospital in Farmington. He gave an interesting talk on "The Use of the Newer Steroids in the Treatment of Allergic Diseases."

His formal presentation was followed by a general discussion period at which numerous questions were asked.

Jack Foster, M.D., *Secretary*



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Sodium para-aminobenzoate	0.3 Gm. (5 gr.)
Ascorbic acid	50.0 mg.

or for the patient who should avoid sodium

PABALATE® - Sodium Free

Pabalate, with sodium salts replaced by potassium salts.

In each enteric-coated tablet:

Potassium salicylate	0.3 Gm. (5 gr.)
Potassium para-aminobenzoate	0.3 Gm. (5 gr.)
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In each enteric-coated tablet:

Hydrocortisone (alcohol)	2.5 mg.
Potassium salicylate	0.3 Gm.
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Ascorbic acid	50.0 mg.

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For steroid or non-steroid therapy: SAFE DEPENDABLE ECONOMICAL

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MISSOURI STATE MEDICAL ASSOCIATION

The 101st Annual Session of the Missouri State Medical Association will be held at Hotel Muehlebach, Kansas City, April 5, 6, 7, 8, 1959.

PROGRAM

Sunday, April 5, 1959

1:30 p.m. House of Delegates, Colonial Room, Hotel Muehlebach.
3:30 p.m. Reference Committee meetings, Hotel Muehlebach.

Monday, April 6, 1959

9:00 a.m. Motion picture, Colonial Room.
9:30 a.m. Panel: Staphylococcus Infections in Hospitals.
Moderator: Ralph A. Kinsella, Sr., M.D., St. Louis.
Panelists: Clement E. Brooke, M.D., Columbia.
Harvey R. Bernard, M.D., St. Louis.
R. P. Wright, M.D., Kansas City.
Frank R. Bradley, M.D., St. Louis.
10:30 a.m. Intermission to View Exhibits, Grand Ball Room.
11:00 a.m. Cardiac Arrhythmias, Michael Bernreiter, M.D., Kansas City.
11:15 a.m. The Diagnosis and Management of Polycythemia, George E. Thoma, M.D., St. Louis.
11:30 a.m. Idiopathic Ulcerative Colitis, F. B. Campbell, M.D.; J. G. Campbell, M.D., and Joe E. Hirsch, M.D., Kansas City.
11:45 a.m. Adult Diabetes Mellitus: Four Years' Experience With Oral Hypoglycemic Agents in Treatment, Norman W. Drey, M.D., St. Louis.
12:00 noon. Committee on Maternal Welfare Luncheon meeting.
2:00 p.m. Working Together for an Improved Missouri Mental Health Program, Addison M. Duval, M.D., Washington, D. C.
2:30 p.m. The Increasing Menace of Carcinoma of the Lung, Alton Ochsner, M.D., New Orleans, La.
3:00 p.m. Intermission to View Exhibits.
3:30 p.m. Clinical Pathologic Conference, Ferdinant C. Helwig, M.D., Kansas City, Moderator.
4:30 p.m. House of Delegates.

Tuesday, April 7, 1959

9:00 a.m. Motion picture, Colonial Room.
9:30 a.m. Instruction Courses, Rooms 362, 363, 364, 365, T21, T22.
Anesthesiology, Including Complications, Kenneth K. Keown, M.D., Columbia.
Management of Injuries of the Back and Knee, Richard H. Kiene, M.D., Kansas City.
Use of Diuretics, Hubert M. Parker, M.D., Kansas City.
Diagnosis of the Acute Abdomen, Ned D. Rodes, M.D., Mexico.
Urinary Tract Infections in Children, Eugene J. Schwartz, M.D., Springfield.
Pelvic Pain and Hemorrhage in Women, Gerald L. Miller, M.D., Kansas City.
10:30 a.m. Intermission to Visit Exhibits.
11:00 a.m. Esophageal Hiatal Hernia, James H. Growdon, M.D., Little Rock, Arkansas.
11:30 a.m. Abnormal Uterine Bleeding, Roy G. Holly, M.D., Omaha, Nebr.
12:00 noon. University of Missouri Medical Alumni Luncheon meeting.
2:00 p.m. Pancreatitis, E. E. Wollaeger, M.D., Rochester, Minn.
2:30 p.m. Recent Advances in Roentgenology of the Biliary System, Lester W. Paul, M.D., Madison, Wis.
3:00 p.m. Intermission to View Exhibits.
3:30 p.m. Panel:
Moderator: Hector W. Benoit, M.D., Kansas City.
Panelists: Guest Speakers.
7:30 p.m. Annual Banquet.

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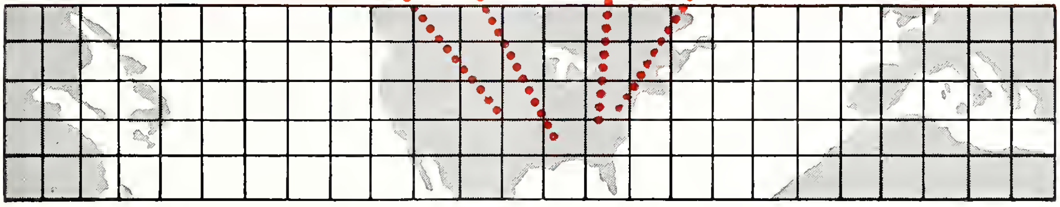
(brand of hydroxyzine)

IN GERIATRICS
"ability to decide correctly has increased, while the illogical response to anxiety has diminished."[1]

IN WORKING ADULTS
"especially well suited for ambulatory patients who must work, drive a car, or operate machinery."[3]

IN PEDIATRICS
"ATARAX appeared to reduce anxiety and restlessness, improve sleep patterns and make the child more amenable to the development of new patterns of behavior. . . ."[2]

IN GENERAL
ATARAX is "effective in controlling tension and anxiety. . . . Its safety makes it an excellent drug for out-patient use in office practice."[4]



INVESTIGATORS AGREE ON OPTIMAL ATARAX DOSAGES

For childhood behavior disorders	10 mg. tablets	3-6 years, one tablet t.i.d. over 6 years, two tablets t.i.d.
	Syrup	3-6 years, one tsp. t.i.d. over 6 years, two tsp. t.i.d.
For adult tension and anxiety	25 mg. tablets	one tablet q.i.d.
	Syrup	one tbsp. q.i.d.
For severe emotional disturbances	100 mg. tablets	one tablet t.i.d.
For adult psychiatric and emotional emergencies	Parenteral Solution	25 mg. (1-2 cc.) intramuscularly, 3-4 times daily, at 4-hour intervals. Dosage for children under 12 not established.

Supplied: Tablets, bottles of 100. Syrup, pint bottles. Parenteral Solution, 100 cc. multiple-dose vials.

References: 1. Smigel, J. O., et al.: J. Am. Ger. Soc., in press. 2. Freedman, A. M.: Pediat. Clin. North America 5:573 (Aug.) 1958. 3. Ayd, F. J., Jr.: New York J. Med. 57:1742 (May 15) 1957. 4. Menger, H. C.: New York J. Med. 58:1684 (May 15) 1958. 5. Coirault, M., et al.: Presse méd. 64:2239 (Dec. 26) 1956. 6. Bayart, J.: Presented at the International Congress of Pediatrics, Copenhagen, Denmark, July 22-27, 1956.

ATARAX®

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Science for the World's Well-Being

Wednesday, April 8, 1959

9:00 a.m. Motion picture. Colonial Room.
9:30 a.m. The Management of the Migraine Headache Patient, Robert E. Ryan, M.D., St. Louis.
9:45 a.m. The Surgical Treatment of Peptic Ulcer, Russell J. Crider, M.D., and Ben L. Neubeiser, M.D., St. Charles.
10:00 a.m. The Nonuse of Steroids in Allergic Diseases, Stanley L. Goldman, M.D., Kansas City.
10:15 a.m. The Management of Carcinoma of the Lip, E. J. Schewe, Jr., M.D., Columbia.
10:30 a.m. Intermission to View Exhibits.
11:00 a.m. Present Day Concepts in the Treatment of Occlusive Cerebral Vascular Disease, Clark H. Millikan, M.D., Rochester, Minn. Sponsored by the Missouri Society of Internal Medicine.
11:00 a.m. Panel: Office Psychiatry.
The Referral: Making the Examination and Diagnosis, Arnold S. Block, M.D., St. Louis.
Psychotherapy: Principles, Technics and Types, Kenneth D. Michael, M.D., St. Louis.
Emergency Treatment and Planning With Family and Community Members, Leopold Hofstatter, M.D., St. Louis.
Sponsored by the St. Louis Society of Neurology and Psychiatry.

The Council

The Council met at the Coronado Hotel, St. Louis, December 13, 14, 1958, with J. H. Summers, M.D., Lebanon, Chairman, presiding. Those present were Drs. Summers, Donald M. Dowell, Chillicothe; B. L. Murphy, Hannibal; Leonard T. Furlow, St. Louis; Joseph C. Creech, Troy; B. M. Stuart, Boonville; W. W. Tillman, Springfield; Ben M. Bull, Ironton; W. F. Francka, Hannibal; R. O. Muether, St. Louis; John I. Matthews, Jefferson City; Joseph C. Peden, St. Louis; Durward G. Hall, Springfield; Oscar P. Hampton, University City; Earl L. Loyd, Jefferson City; Daniel B. Landau, Hannibal; H. M. Hardwicke, Jefferson City; Messrs. John W. Noble, Kennett; T. R. O'Brien, Ray McIntyre, Jordan Singleton, Lemoine Skinner, Bill Logan, Hollister Smith, St. Louis. Members of the Board of Medical Examiners sat with the Council for a time.

The minutes of the last meeting of the Council were approved.

LIBRARY FACILITIES

A letter suggesting that the Association make arrangements with a library for use of members out in the state was read. It was pointed out that the Library of Congress was available and that library memberships could be held in libraries in the state. It was decided that copies of the letter be sent to St. Louis Medical Society and to Jackson County Medical Society for their consideration.

INSURANCE

The possibility of an arrangement for members of the Association to obtain group insurance was discussed and on motion of Dr. Dowell it was voted that a committee be appointed to work with a consultant in obtaining information to be presented at a later date to the Council.

FIELD SECRETARY'S REPORT

Mr. McIntyre reported on new and proposed hospitals in the state. He said that the Texas County Memorial Hospital at Houston has just opened and that one at West Plains would open shortly. Under construction he listed hospitals or additions at Jefferson City, Brookfield, Columbia, Sedalia, Poplar Bluff, Fulton, Waverly. Those that are being planned are in Ripley County, Carrollton, Butler, Eldorado Springs, Fredericktown, St. Charles, Hannibal, Fayette, Potosi and Unionville. The possibility that some unnecessary hospitals might be built was discussed. Mr. McIntyre discussed the staffing problem at the University of Missouri Medical Center and the question of training personnel was discussed. Several outstanding meetings in the state were reported.

COMMITTEE ON FRACTURES

A letter from the Committee on Fractures was presented which stated in part: "The Fracture Committee is opposed to any change in present definition of Chiropody as defined in the statutes in the State of Missouri." On motion of Dr. Furlow, the report was accepted with the suggestion that the Chairman advise the Chiropody organization of this action.

A.M.A. SESSION

Drs. Hall and Peden reported on the Minneapolis meeting of the American Medical Association. (Report appears in the January issue of Missouri Medicine.) Dr. Hall asked that the A.M.A. delegates be instructed concerning their stand concerning Dr. Robbins for the Board of Trustees and Dr. Lull for President-Elect. On motion of Dr. Tillman, it was voted that letters of commendation go to the delegates and that they be instructed to use their own judgment concerning candidates for office.

DIVISION OF HEALTH

Dr. Hardwicke said that the Division of Health was doing only 35 per cent of the work that law would

for depression

'Deprol'†

Clinically confirmed in over 2,500 documented case histories[1,2]

CONFIRMED EFFICACY

Deprol
- acts promptly to control depression *without* stimulation
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DOCUMENTED SAFETY

Deprol is unlike amine-oxidase inhibitors
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Deprol is unlike central nervous stimulants
- does not cause insomnia
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- has no depression-producing aftereffects
- can be used freely in hypertension and in unstable personalities

Dosage: Usual starting dose is 1 tablet q.i.d. When necessary, this dose may be gradually increased up to 3 tablets q.i.d.

Composition: Each tablet contains 400 mg. meprobamate and 1 mg. 2-diethylaminoethyl benzilate hydrochloride (benactyzine HCl).

Supplied: Bottles of 50 scored tablets.

1. Alexander, L.: Chemotherapy of depression—Use of meprobamate combined with benactyzine (2-diethylaminoethyl benzilate) hydrochloride. J.A.M.A. **166**:1019, March 1, 1958. 2. Current personal communications; in the files of Wallace Laboratories.

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allow and that an increase of 32 per cent in the budget for the next year was being asked, principally for the purpose of increasing personnel. He discussed the change in the Hill-Burton law and said that hereafter physicians from the community requesting a hospital would be asked to serve on an advisory committee. He discussed a proposed Premature Center at Cape Girardeau, also one in existence in Springfield, and said that he had not asked for an appropriation for the continuance of such Centers. He said that an immunization trial will be carried out in Jefferson County in cooperation with the school board toward the requirement of immunization of children for school entrance. The difficulty of establishing well baby clinics in some counties because of the lack of M.D.'s was presented. A fact sheet was presented and some of the items given, as "Only 30 per cent of food and drugs processed and sold in the state can be inspected" were discussed. At Dr. Hardwicke's request that the budget request of the Division be reviewed, on motion of Dr. Dowell, it was voted that the Advisory Committee to the Division be asked to do this.

LEGISLATION

Possible legislation that may be presented in the coming session of the Legislature was discussed briefly including legislation concerning optometry similar to that introduced in 1957 session; legislation to place all examining boards in the Department of Commerce; legislation to place Blue Cross and Blue Shield under the Insurance Commissioner; vendor legislation which presently appears will be restricted to hospital care for acute cases of the aged and disabled, involving from 1 to 3 million dollars. The work of the Committee on Alcoholism was reviewed in regard to obtaining legislation and this was deferred awaiting action of the Budget Committee.

FREE CHOICE OF PHYSICIAN

A general discussion took place on free choice of physician, panel practice, institutes as the one at St. Louis City Hospital, the report of the Commission on Medical Care Plans of the A.M.A., the problem of the Blue Shield in paying to other than physicians, and other socio-economic questions involving medical and hospital practice today. The report of the Commission on Medical Care Plans takes up two large volumes and was tabled by the A.M.A. delegates in Minneapolis until the June 1959 meeting, to give the states an opportunity to study it and come to some conclusion. In effect, however, the report suggests a re-examination of the entire principle of free choice. The delegates adopted the following statement in this connection:

"We respectfully suggest to the constituent associations reviewing the report in the interim, that their attitude regarding the report will be clarified if they arrive at some decisions in regard to the following basic points:

"1. Free Choice of Physician—Acknowledging the importance of free choice of physician, is this concept to be considered a fundamental principle, incontrovertible, unalterable and essential to good medical care without qualification?

"2. Closed Panel Systems—What is or will be your attitude regarding physician participation in those systems of medical care which restrict free choice of physician?

"These suggestions acknowledge that the policy of the American Medical Association to encourage and support the highest quality of medical care for all patients remains unchanged. They question, however, whether attitudes toward the free choice of physician and the closed panel system may be undergoing evolutionary change."

The state associations are invited to forward their replies to these questions to the A.M.A. 60 days in advance of the June session.

On motion of Dr. Muether it was voted that the Council act as a committee of the whole to make a definitive study of the problem of corporate practice of medicine, the Commission report, the principle of free choice of physician and the questions suggested by the A.M.A. House of Delegates, and attempt to formulate all of the possible alternate courses that MSMA might follow, including the possible consequences of those courses, and the actions that would have to be taken to implement them, and that a summary of the various courses be prepared for the consideration of the MSMA House of Delegates.

COMMITTEE ON CARDIAC DISEASES

Dr. Loyd presented a questionnaire for the purpose of gaining information on the number of cases of rheumatic fever and congenital heart disease in the state which the Committee recommended be sent out by the Missouri Heart Association. On motion of Dr. Tillman, it was voted to approve the survey. It was pointed out that it was expected that results of the survey would be published in MISSOURI MEDICINE.

Dr. Loyd reported on tape recordings which have been produced by the Greene County chapter and with the approval of the Medical Society and recommended that these be made available to radio stations. On motion of Dr. Francka, the tape recordings were approved. Dr. Loyd reported that the Committee had requested approval of the Council on prophylactic work in heart disease. It was felt that the Council should not act on scientific matters.

INFANT AND CHILD CARE

Dr. Landau reported a meeting of the Committee at which Dr. Fred Hein of the A.M.A. spoke and quoted him: "There is need for doctor advice and participation in school health programs on all local and state levels. School people want the help of the practicing physician as well as that of the full-time school physician, but they are somewhat reluctant to take the initiative in asking for it. No school health program can succeed, as it should, without participation of the local physicians in both the planning and executing phases." Dr. Landau said that traffic accidents and deaths involving teen-age drivers were cited as increasing problems demanding more attention and united efforts toward solutions. He said the Committee felt this should be included for discussion in school health workshops. He said that the Committee recommended (1) That the Council again recommend to the County Medical societies the appointment of a school health committee for each county society. (2) That a state-wide meeting on Physicians and Schools be developed and held—that a small planning committee composed of representatives of the Missouri Division of Health, the Missouri Department of Education, the Missouri Dental Association and the Missouri State Medical Association meet under chairmanship of Dr. H. M. Hardwicke and plan, and call this state-wide meeting. On motion of Dr. Tillman these recommendations were approved.

TREASURER'S REPORT

Dr. Muether reported on the present financial status of the Association and said that Mr. Rabbitt and Mr. Weidert of the Mercantile Trust Company would speak to the Council on the Association's investments. Mr. Rabbitt recommended that the Association change its investment program to permit purchase of 25 per cent of assets in common stocks over a gradual period. On motion of Dr. Furlow, the treasurer was authorized to so advise the Trust Company.

ANNUAL SESSION

It was reported that all sessions of the 1959 Annual Meeting would be held in the Muehlebach Hotel. The scientific program was reviewed briefly. The question of scientific exhibits was discussed, it being brought out that they are a valuable part of a scientific session but that it is unfair to attempt to have them when there is not sufficient space and facilities, as will be the case at the 1959 session. On motion of Dr. Muether, it was voted that there be no scientific exhibits or hobby show at the 1959 session.

EXECUTIVE SESSION

The Council went into executive session to consider the budget and the report of the Committee on Alcoholism.

REPORT OF BUDGET COMMITTEE

On motion of Dr. Muether, the following budget for 1959 was adopted:

BUDGET FOR 1959

Salaries	$ 57,900.00
Office Rent	4,700.00
Postage	6,000.00
Printing, stationery, office supplies	5,000.00
Journal expense, printing and paper	45,000.00
Telephone and telegraph	2,500.00
Employee Insurance and Retirement Plans	6,500.00
Professional Fees	4,000.00
Taxes Payroll	1,700.00
Travel Expense	7,000.00
Committees	36,975.00
Furniture and Fixtures	1,200.00
General Expense	3,000.00
	$181,475.00

COMMITTEE ON ALCOHOLISM

The Budget Committee reported "The Council has received the published study and the recommendations of the Committee on Alcoholism. The broad policy of the Association in this area has now been defined. The matter is now in the hands of the Council and will be pursued as circumstances and the best judgment of the Council may determine."

The following, on motion of Dr. Francka, was passed: In the light of the recommendations of the Budget Committee—and in order that the Association's program in the matter of alcoholism may be appropriately related to the over-all program of the MSMA—the Council will assume direct responsibility for all matters included in the recommendations and study of the special Committee on Alcoholism and that Committee is now discharged.

NEXT MEETING

It was decided to attempt to plan that the Council begin its work on Friday evening, February 20, to allow members who will also attend the Missouri Medical Service annual meeting on February 22, to attend both meetings.

MISSOURI SOCIETY OF MEDICAL TECHNOLOGISTS

TWELTH ANNUAL CONVENTION

April 5-8, 1959
Hotel Muehlebach, Kansas City

Sunday, April 5

Business Meeting, Trinity Lutheran Hospital
Buffet Supper, Trinity Lutheran Hospital

Monday, April 6

Joint Dinner with the Missouri Society of Pathologists

Tuesday, April 7

Luncheon, Hotel Muehlebach

Scientific Program, April 6-8

Scientific sessions, Hotel Muehlebach, including Chemistry, Hematology, Public Health, Histology, Serology and Blood Banking

DEATHS

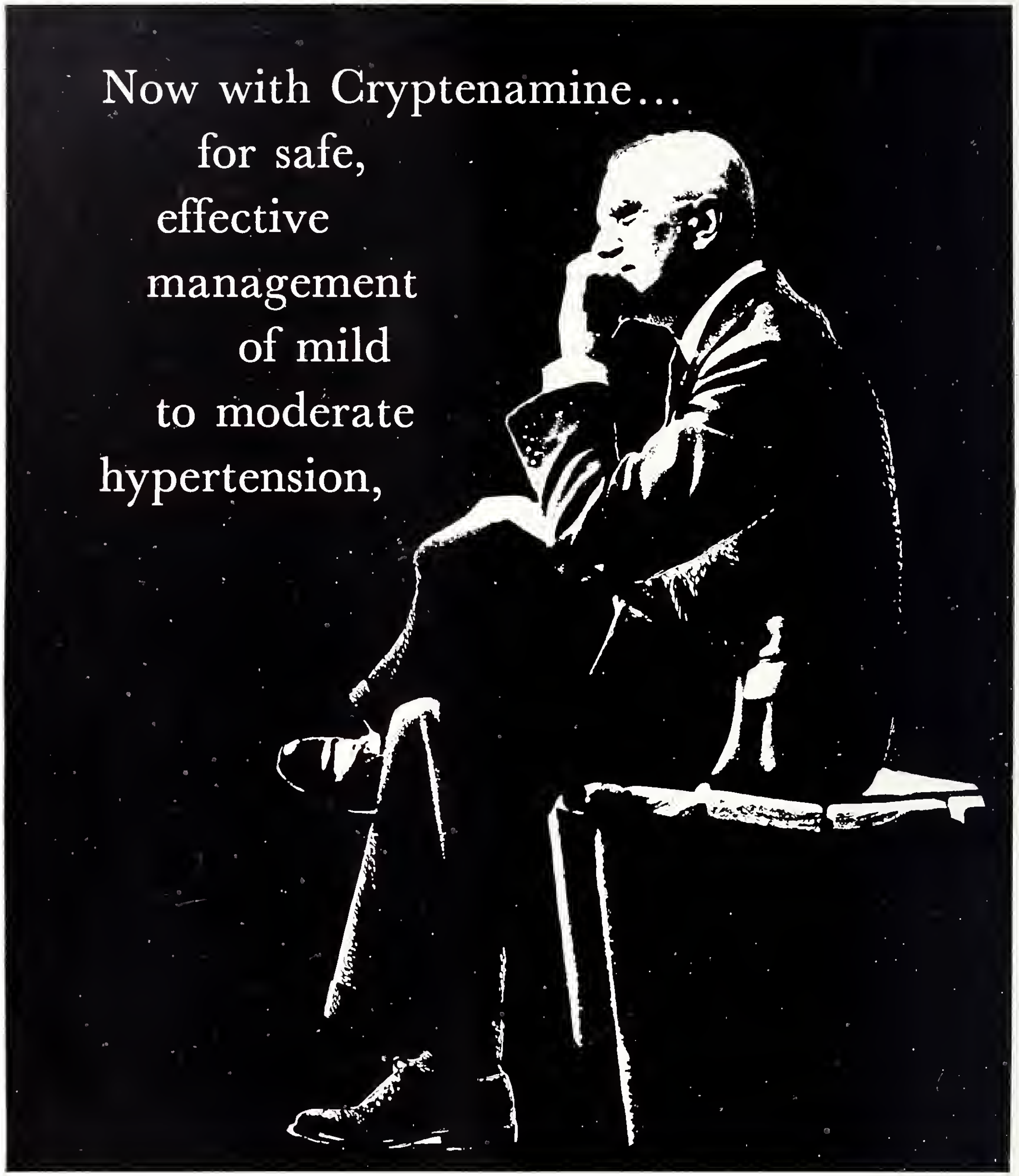
Schooley, Renick C., M.D., Odessa, a graduate of Beaumont Hospital Medical College, 1896; member of Lafayette-Ray County Medical Society; aged 86; died November 13.

Treadway, W. W., M.D., Clarksville, a graduate of St. Louis College of Physicians & Surgeons, 1889; member of Pike County Medical Society; aged 92; died December 1.

Sachs, Ernest, M.D., New Haven, Connecticut, a graduate of Johns Hopkins Medical School, 1904; member of St. Louis Medical Society; aged 79; died December 2.

Moore, Neil S., M.D., St. Louis, a graduate of St. Louis University School of Medicine, 1913; member of St. Louis Medical Society; aged 70; died December 5.

Allen, Duff S., M.D., St. Louis, a graduate of Washington University Medical School, 1919; member of St. Louis Medical Society; aged 63; died December 7.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to moderate
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Cryptenamine (tannates)	40 C.S.R.* Units
Sodium nitrite	1 gr.
Phenobarbital	¼ gr.

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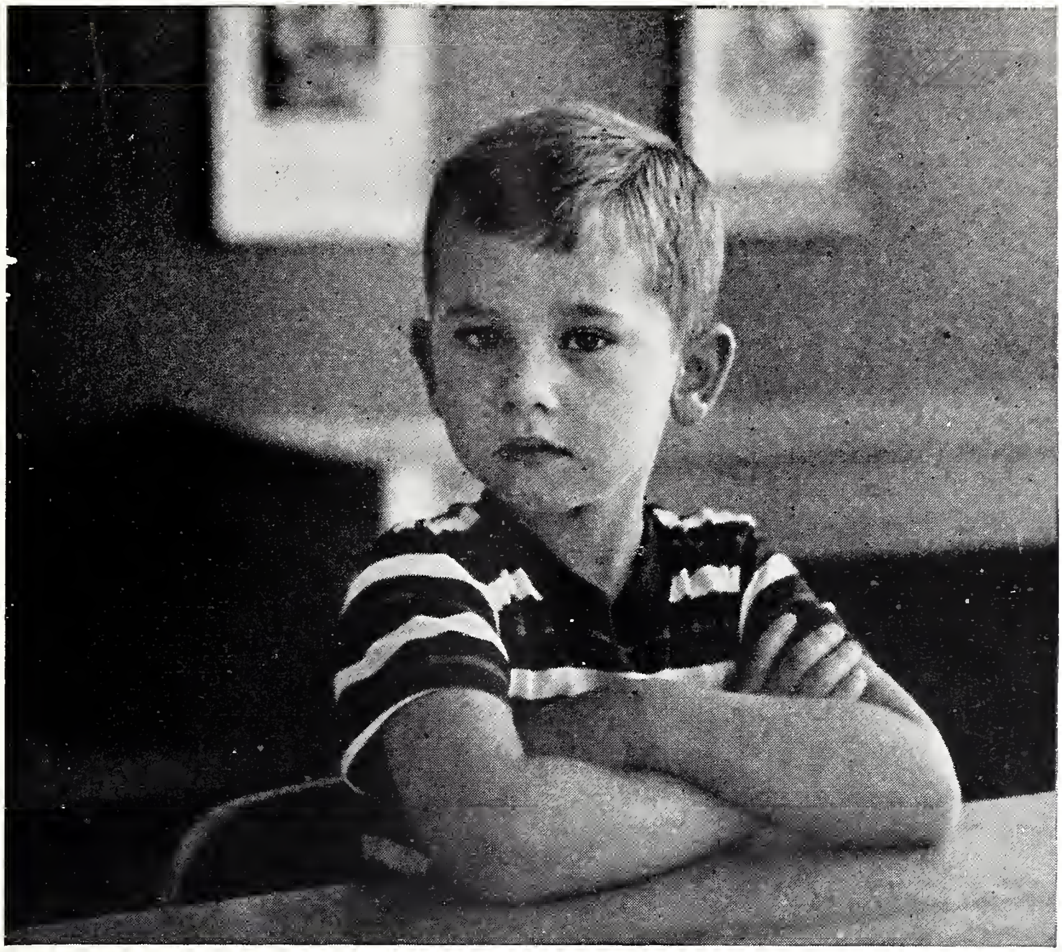

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AN EXPRESSION OF CONFIDENCE in your therapeutic ability may be expected when you prescribe Pyribenzamine Expectorant for cough in children. A combination of 3 active agents, Pyribenzamine Expectorant with Ephedrine relieves congestion, makes breathing easier, promotes productive expectoration. And the cherry flavor is usually quite acceptable to pediatric tastes.

DOSAGE: ½ to 1 teaspoon every 3 or 4 hours.

SUPPLIED: Expectorant with Ephedrine, containing 30 mg. Pyribenzamine citrate 10 mg. ephedrine sulfate and 80 mg. ammonium chloride per 4-ml. teaspoon.

ALSO AVAILABLE: Pyribenzamine Expectorant with Codeine and Ephedrine, same formula plus 8 mg. codeine phosphate (exempt narcotic).

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CIBA
SUMMIT, N. J.

Correspondence

The Historical Unit
United States Army Medical Service

Washington 12, D. C.
December 8, 1958

To the Editor:

I would be the last to deny the right of a reviewer to express his honest opinion about a book, even if I happened to have editorial responsibility for it. The two reviews of volumes of the history of the U. S. Army Medical Department in World War II in MISSOURI MEDICINE for September 1958 (55:1026-1027) seem, however, to fall into a somewhat special category. Frankly, I wonder whether the reviewer (whether G. P. stands for his initials or for General Practitioner I wouldn't know) has read either book.

The general surgery volume is in part, as he says, the record of the work of an auxiliary surgical group team in the Mediterranean theater, but I am afraid a "surgical chief having to organize a theater of operations," if he were assigned that incredible task, would not get much help from it. This is a clinical, not an administrative, volume. It is based on the largest series of wartime abdominal injuries ever to be analyzed in detail and also includes the wartime conception, now generally adopted, of shock and resuscitation. With that information perhaps some of your subscribers mght wish to disregard your reviewer's recommendation that the book should not be read by anyone.

The volume on orthopedic surgery in the European Theater of Operations was edited and prepared by Dr. Mather Cleveland, it is true, but it does not "principally record" his military experience. It is based, instead, on a large number of special reports and studies prepared for this book and edited compositely for it. This volume, your reviewer states "apparently abstracts numerous Army directives" on various subjects. It does indeed make use of many such directives, but again it is not an administrative volume, as he implies, nor was any hospital installation staffed with consultants in any theater. Charitably, I attribute the organization described as "field evacuation" hospital to a printer's error in punctuation.

It is quite true that some of the material in this book did appear in the periodical literature—and in journals other than the *Journal of Bone and Joint Surgery*—but it was the deliberate decision of those responsible for this historical project that this was not the way to preserve historical data and that, in the unhappy event of another war, it would be completely impractical for medical officers to secure their information from scattered periodicals. I assure you that there was due consideration of the "taxpayer's money" when this decision was made.

As I have said, a reviewer may arrive at his own decisions. De gustibus. Also chacun à son gout. But he must comment on what is in the book, not what he thinks is there. We have had occasional adverse comments on our books, all of these as part of generally favorable comments, and some reviewers have been naive enough to say—of the volume on orthopedic surgery in the European Theater particularly—that the writers have "breathed new life into dead facts." One of them couldn't put the book down waiting to see what came next. We have, therefore, some compensation for these two devastating reviews.

In the interest of accuracy, I shall appreciate your publishing this letter.

Sincerely yours,

JOHN BOYD COATES, JR.
Colonel, Medical Corps
Editor in Chief

Missouri Medicine in Review

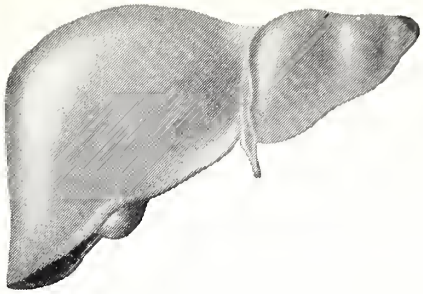
LEO H. POLLOCK, M.D.

FORTY YEARS AGO

"When the history of the medical service in the war is written, Missouri physicians will have an honorable place among those who have shed luster on the medical profession of this country and demonstrated the latent power and resourcefulness characteristic of the American physician. We have lost ten physicians, five of them killed in action or succumbing to wounds, two from accident, and three from disease. Eight of the ten were members of our Association. Besides these casualties, five were captured by the enemy. To this great work, Missouri contributed 1,499 of her best physicians, being 24.7 per cent of the total number of physicians in the state. Out of this number 1,022 are members of our Association, or 68 per cent of the number under commission."

Through the death of Dr. J. C. Matthews of Springfield the office of second vice president became vacant and President Overholser has ap-

(Continued on page 205)



fatty livers, portal cirrhosis, and widespread liver damage,
with failure in detoxifying ability, and general hepatic dysfunction are commonly encountered in diabetes, obesity, alcoholism, atherosclerosis and coronary disease.

conversely, certain of these conditions tend to cause exacerbation of the hepatic disturbance,
thus creating a vicious cycle seriously detrimental to the patient's health.

methischol helps terminate this vicious cycle
by increasing phospholipid turnover,
reducing fatty deposits and fibrosis of the liver,
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generally improving liver function.

when atherosclerosis and/or coronary disease occur
as they so frequently do in diabetes, alcoholism and obesity . . . Methischol aids in reducing elevated cholesterol levels, lowering chylomicron-lipomicron ratios towards the normal, and improving cholesterol and fat transport and metabolism.

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From the Medical Schools

UNIVERSITY OF MISSOURI

Meetings

A meeting of the Medical History Group was held on November 20 at the Medical Center. Dr. John Lowney, assistant professor of medicine, discussed "Art and Medicine" at this meeting. The next meeting will be held on January 8 at which time Dr. Samuel P. W. Black, professor of neurosurgery, will discuss "Harvey Cushing; the Founding of a School."

Trips and Talks

Dr. Roscoe L. Pullen, Dean of the School of Medicine, spoke on the subject of "Whither Medicine" at a meeting of the Greater Kansas City, Missouri Chapter of the American Academy of General Practice in Kansas City, on November 20, 1958.

Dr. Jerry W. Brown, associate professor of Anatomy, attended the annual meeting of the Association for Research in Nervous and Mental Diseases held in New York City on December 12 and 13. On December 14 and 15, Dr. Brown visited Dr. Tryphena Humphrey, professor of anatomy, at the University of Pittsburgh, to confer with her on his research in Neuroanatomy.

Dr. F. Eugene Doenges, assistant professor of anatomy, gave a special lecture to members of the Jefferson Junior High School Science Class on November 20. Dr. Doenges lectured on the human digestive system and discussed the study of human anatomy with research potentialities.

Dr. C. Thorpe Ray, professor and chairman of the Department of Medicine, gave a lecture on "Electrolytes" to the members of the St. Mary's Hospital staff in Jefferson City, on November 16. On December 2 through 5, Dr. Ray spoke on "Practical Aspects of Treatment of Congestive Heart Failure" at a meeting of the American Medical Association held in Minneapolis, Minnesota.

The following members of the Department of Microbiology attended the meeting of the Eastern Missouri Branch of the Society of American Bacteriologists: Dr. Frank B. Engley, Jr., professor and chairman of the Department of Microbiology; Dr. H. S. Goldberg, associate professor; Dr. James T. Barrett, assistant professor; Dr. Michael H. Ivey, assistant professor; and several graduate students. At this meeting, Dr. Engley was reelected president of the group and papers were presented by graduate student Joseph Armstrong and Dr. Goldberg on "Colonial Observations on the Leptospira" and Dr. Barrett and graduate student Philip Pokorny presented a paper on "Immunization With Pancreas Antigen." Dr. Ivey participated in a panel discussion on "Parasitic Infections in Missouri and Diagnostic Procedures" at a seminar in the Department of Medicine on November 17.

Dr. Joseph E. Flynn, professor and chairman of the Department of Pathology, conducted a bone marrow workshop for Missouri's medical technologists on November 30 at the University of Missouri Medical Center. Dr. Flynn was assisted by three other members of the Department, Dr. Vincent P. Perna, assistant professor, Dr. Fred Ransdell, instructor, and Mrs. L'Nora Wells, chief medical technologist. About twenty-five medical technologists from outside of Columbia attended the course. Each technologist received a set of blood and bone marrow preparations from patients with various diseases. Dr. Flynn and his staff discussed the proper interpretation of these preparations after they had been studied microscopically by the technologists. Other workshops for the medical technologists include one on clinical chemistry on December 26, 1958 and one on parasitology to be held June 7, 1959. Dr. Perna attended the annual meeting of the American Association of Blood Banks held in Cincinnati, Ohio, on November 20, 21, and 22.

Dr. J. E. Randall, associate professor of physiology and biophysics, had a display on "Cardiovascular Pulsatile Pressure—Flow Relationships" in the University of Missouri booth at the Midwest Institute of Radio Engineers convention held in Kansas City, Missouri, December 9 to 12.

Dr. G. S. Lodwick, professor and chairman of the Department of Radiology, and Dr. T. E. Keats, associate professor, attended the meeting of the Radiological Society of North America held in Chicago November 17 to 21. On November 18, Dr. Lodwick presented an instructional course on "Roentgen Aspects of Bone Neoplasms."

Dr. Hugh E. Stephenson, Jr., professor and chairman of the Department of Surgery, and Dr. J. M. Martt, assistant professor of medicine, spoke to the Tri-County Academy of General Practice in Washington, Missouri, on December 9 on the "Selection of Patients for Intracardiac Surgery."

Gifts and Grants

Dr. Frank B. Engley, Jr., professor and chairman of the Department of Microbiology, has been awarded a grant by the U.S.P.H.S. in the amount of $6,000 effective December 1, 1958, to November 30, 1959, for studies on K.-pneumoniae and related organisms.

Dr. Arnold A. White, assistant professor of biochemistry, has been awarded a grant by the University Research Council for the purchase of a Microgram Balance to be used in the study of the role of the enzyme, alkaline phosphatase in the formation of bones.

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- a reliable defense against monilial complications

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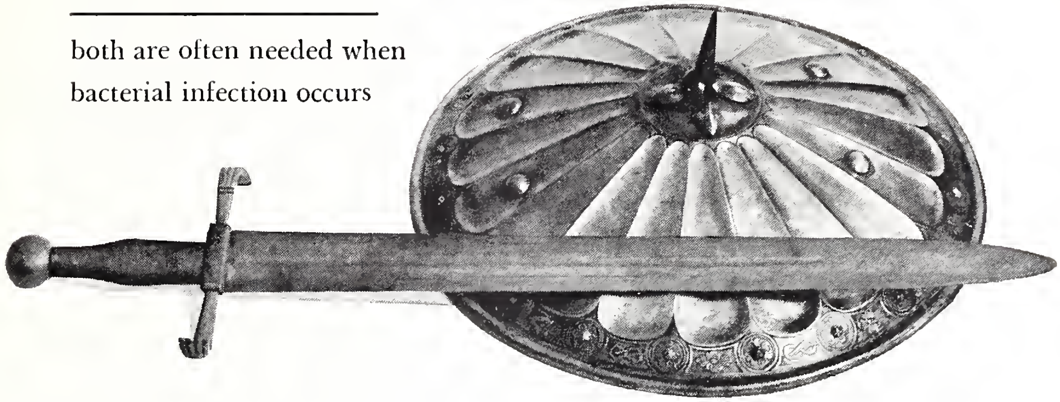
both are often needed when bacterial infection occurs



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New Appointments

Dr. Charles S. Exon was appointed clinical associate in surgery effective November 4, 1958. Dr. Exon received his M.D. in 1944 from Washington University and he is at present in private practice in Jefferson City, Missouri.

Dr. Russell E. Hanlon has been appointed assistant instructor and second year resident in obstetrics and gynecology effective July 1, 1959. Dr. Hanlon received his M.D. in 1955 from the University of Michigan and is currently on duty with the U. S. Navy.

Dr. John R. Ellis has been appointed assistant instructor and first year resident in surgery effective July 1, 1959. Dr. Ellis received his M.D. in 1956 from Washington University and is at present with the U. S. Army Medical Corps.

Dr. Robert V. Tompson has been appointed assistant instructor and first year resident in surgery effective July 1, 1959. Dr. Tompson received his M.D. in 1958 from George Washington University and is at present interning at George Washington University Hospital.

Dr. William R. R. Loney has been appointed assistant instructor and first year resident in surgery effective February 1, 1959. Dr. Loney received his M.D. in 1955 from the University of Minnesota School of Medicine and is at present in the U. S. Air Force.

Dr. James Leger Ross has been appointed assistant instructor and first year resident in surgery effective July 1, 1959. Dr. Ross received his M.D. in 1954 from McGill University in Montreal, Canada and is at present in private general practice in Sherbrooke, Quebec, Canada.

Dr. Venudhar Reddy has been appointed assistant instructor and first year resident in pediatrics effective July 1, 1959. Dr. Reddy received his M.B.B.S. from Osmania Medical College in Hyderabad, India, and is at present serving a rotating internship at Fairview Park Hospital in Cleveland, Ohio.

Dr. Michael Joseph Anigian has been appointed assistant instructor and first year resident in medicine effective July 1, 1959. Dr. Anigian received his M.D. in 1958 from St. Louis University and is at present interning at the University of Chicago Clinics.

WASHINGTON UNIVERSITY

Lecture, Meeting

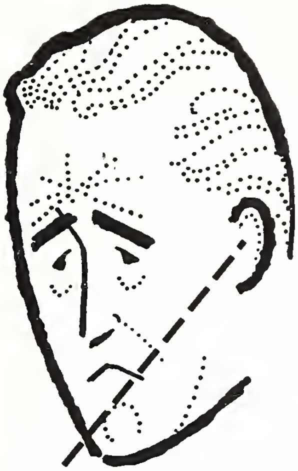
Dr. Rupert Everett Billingham, M.A., D.Ph., D.Sc., member of the Wistar Institute of Anatomy and Biology, Philadelphia, delivered the ninth annual Major G. Seelig lecture December 9 in the David P. Whol, Jr. Memorial Hospital Auditorium. The lecture is sponsored by Washington University School of Medicine. Also professor of zoology at the University of Pennsylvania, Dr. Billingham discussed studies on transplantation immunity. From 1951-1957 he was research fellow of the British Empire Cancer Campaign and honorary research associate at University College, London. Well known in the field of zoology, he was a lecturer in that field from 1947 to 1951 at the University of Birmingham, England. The lecture honors the late Dr. Seelig, who was professor of clinical surgery at the medical school and director of research at Barnard Free Skin and Cancer Hospital for many years. Noted for contributions to knowledge of cancer in humans, he was chiefly responsible for the founding of People's Hospital. Dr. Seelig died in 1953.

Three faculty members presented research papers at a meeting of the Washington University Medical Society, December 3, in the auditorium of the David P. Wohl, Jr. Memorial Hospital. Dr. H. L. White, professor and head of the department of physiology, discussed comparison of external loss of sodium and chloride with loss from sucrose space in rats. The work was done by Dr. White; Doris Rolf, research assistant professor; Dr. Marino Audia, W. K. Kellogg Foundation international fellow in physiology; and C. M. Armstrong and B. W. Steiger, third year medical students. "Regulation of Pituitary Thyroid Axis" was reported by Dr. Seymour Reichlin, assistant professor of medicine and psychiatry. Dr. Blake W. Moore, research instructor in cancer, reported on "Chromatographic Fractionation of Liver and Hepatoma Supernatants."

Research, Training Grants

The neurosurgery section of Washington University School of Medicine will be among 12 in the United States participating in a five year study of the best treatment methods for hemorrhage from blood vessels of the brain. Research at Washington University will be supported by a $5,919 annual grant awarded Dr. Henry G. Schwartz, professor and head of the neurosurgery section, by the United States Public Health Service. The cooperative study will consist of a tabulation of case histories of patients treated during the five year period to determine which of several surgical methods now in use is safest and most effective. The department of opthalmology at Washington University School of Medicine has received a $5,000 grant from the United States Public Health Service for a study of families of patients with glaucoma. As glaucoma, one of the leading causes of blindness in the United States today, is symptom-free, most people are unaware of it until there has been considerable loss of vision. All close relatives of a selected group of glaucoma patients will be studied in an effort to detect possible earlier evidence of glaucoma than is now recognized and to find as many unsuspected cases of glaucoma as possible so that treatment to avoid further visual loss may be started.

Faculty members of Washington University



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SPONTIN IN SERIOUS

A Special Report from Abbott to the Medical Profession on a Year's Clinical Experience with SPONTIN®

(Ristocetin, Abbott)

In a Spanish province, a patient lay dying of endocarditis. A short wave radio appeal for SPONTIN was intercepted by a Baltimore physician. The antibiotic was immediately flown to this faraway land, and 10 days later—the patient had recovered.

In Chicago, a moribund patient had been administered 18 combinations of 10 different antibiotics without success. Involved was a hospital-acquired staphylococcal pneumonia—plus complications. SPONTIN was substituted and the patient lived.

A five-week-old infant was critically ill with staphylococcal enteritis. Treatment failures included erythromycin and chloramphenicol. Three days of SPONTIN saved this life. The list is long and impressive and it grows daily.

Recently, a study[1] was made of serious and resistant staphylococcal infections reported to Abbott Laboratories. Many of these cases had serious complicating diseases—many were moribund, or almost so, at the time SPONTIN was started. Yet, out of the 160 staphylococcal cases studied, 93 were reported cured and 38 improved after the administration of SPONTIN.

Out of the total of 251 patients with severe infections caused by gram-positive or mixed organisms, 149 were reported cured and 53 others improved. And the record for pediatric practice was every bit as good.

Additionally, SPONTIN continues to exhibit exceptional bactericidal activity against coccal infections[2]. And, according to another study, SPONTIN provides successful short-term therapy in endocarditis[3].

Only last October, at the Antibiotics Symposium in Washington, D. C., a panel of six leading antibiotic experts placed SPONTIN at the top of all other commercially-available antibiotics for treating serious staphylococcal infections. Also, six papers—all dealing with the effectiveness of ristocetin (SPONTIN®) in treating staphylococcal infections—were presented at the Symposium.

One of the most encouraging aspects of the year's literature on SPONTIN is the increasing testimony to its safety. As the months have passed and cases have accumulated by the hundreds, it has become apparent that careful attention to dosage recommendations has practically eliminated toxicity and side effects as serious obstacles to therapy. Also, recent improvements have been made in the manufacture of SPONTIN; the drug is now made from pure crystals.

A recent report[4] in the Journal of the American Medical Association concluded, "It is our opinion that, if proper precautions are observed, ristocetin is a [well tolerated] and potent agent to employ in the treatment of staphylococcal infections." And in another study, after successfully treating 28 patients with a variety of staphylococcal infections, the authors reported[5], "No serious complications were noted."

Few more dramatic records have been written in such a short space of time. SPONTIN has proved itself to be a good answer, perhaps the best answer at present, to the resistant staphylococcal problem — and of real value in other serious coccal infections. It may well be your answer when you're confronted with a serious infection.

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STAPHYLOCOCCAL INFECTIONS

Excerpts from Reports Read at the Antibiotics Symposium

Spontin In Treating Severe Respiratory Infections —"In 13 of 20 patients the results were excellent, with clinical response being evident within one to four days after institution of therapy. In three additional patients, there was some degree of improvement in pneumonic processes superimposed on tuberculosis in two cases and on pulmonary neoplasm in one. In all other cases, serious antecedent pathology undoubtedly influenced the negative or equivocal response to ristocetin therapy.[6]"

Spontin In Treating Staphylococcal Infections—After successfully treating 28 patients, the authors wrote, "Ristocetin or Spontin has proved to be bactericidal and bacteriostatic, particularly for the *Staphylococcus aureus*, which is often resistant to many other antibiotics.[5]"

Spontin In Treating Seven Difficult Cases — "Ristocetin has produced excellent results in eradicating, mitigating or preventing infection in seven selected difficult cases. Six of the seven cases involved *Staphylococcus aureus* which did not respond to chemotherapy with other antibiotics.[7]"

Spontin Blood Levels In Children — "Ristocetin was administered as a single intravenous injection of 12.5 milligrams per kilogram. This resulted in serum levels ranging from 1.3 to 10.6 mcg. after two hours with a gradual fall to a level of 0.7 mcg. per cubic centimeter or less after 12 hours.[8]"

Spontin In Treating Staphylococcal Pneumonia —"Ristocetin was used in the treatment of 24 patients with staphylococcal pneumonia, 17 of whom had failed to respond to previously administered antibiotics. Complete clearing of pneumonitis was obtained in 16 patients and significant improvement occurred in two others. Two patients died of pneumonia; four others succumbed to other lethal diseases.[9]"

Spontin In Treating Children and Adults — "Ristocetin completely controlled severe staphylococcal infections in 11 adults and six children who received adequate therapy.[10]"

1. Totals represent published reports and personal communications to Abbott Laboratories.
2. Sixth Annual Symposium on Antibiotics, Washington, D. C., Oct. 15, 16, 17, 1958.
3. Romansky, M. J., and Holmes, R., Successful Short-Term Therapy of Enterococcal and Staphylococcal Endocarditis with Ristocetin—Seven Patients. Preliminary Report. Antibiotics Annual, 1957-58, p. 187.
4. J. A. M. A., 167:1584, July 26, 1958.
5. Bush, L. F., et al., The Use of Ristocetin (Spontin) in Staphylococcal Infections, In Press, Antibiotics Annual, 1958-59.
6. Billow, F. J., et al., Clinical Observations on Ristocetin—A Preliminary Report on its Efficacy and Toxicity in 20 Unselected Severe Respiratory Infections, In Press, Antibiotics Annual, 1958-59.
7. Miller, J. M., et al., Ristocetin in the Treatment of Seven Selected Difficult Cases, In Press, Antibiotics Annual, 1958-59.
8. Asay, L. D., et al., Ristocetin Serum Levels in Children, In Press, Antibiotics Annual, 1958-59.
9. Schumacher, L. R., et al., Experiences with Ristocetin in Staphylococcal Pneumonia: Observations in 23 Cases, In Press, Antibiotics Annual, 1958-59.
10. Terry, R. B., Ristocetin in Children and Adults, In Press, Antibiotics Annual, 1958-59.

School of Medicine have received $204,289 in renewal research grants from the United States Public Health Service. A grant of $17,731 was awarded Dr. Alexis F. Hartmann, professor and head of the department of pediatrics. This grant continues support of an investigation begun in 1953 by Dr. Hartmann, Dr. Miriam M. Pennoyer, instructor in pediatrics, and Dr. Frances K. Graham, psychologist, now with the University of Wisconsin School of Medicine. At the time of birth, approximately 400 infants were evaluated by researchers and classified into one of three groups. The first included newborns who had difficulty in starting to breathe, or who showed signs of not receiving enough oxygen through the maternal supply before birth. The second group included children having a variety of other complications of birth; the third, infants of normal birth histories used as control subjects to compare children of the first two groups. These children are now being reexamined at 3 years of age to determine whether there are persisting effects of the birth complications. The examination includes tests of intelligence, vocabulary, perceptual motor functions, physical measurements and neurologic examinations. Major portion of the investigation is being conducted by Dr. Claire B. Ernhart, research instructor in psychiatry; Dr. Don L. Thurston, associate professor of pediatrics, and Dr. Graham. Preliminary analyses indicate that children who were oxygen deficient at birth show a small but significant decrease in intelligence and vocabulary skill and are more likely to show neurologic deviations at age 3 years than are children of uncomplicated birth conditions. Drs. Martin and Ruth Silberberg, associate professors of pathology, were awarded a $13,013 renewal grant to study the finer structural and biochemical changes taking place during growth, development and aging of cartilage and bone in various strains of mice of known genetic constitution. Investigation on aging articular cartilage should give insight into an understanding of the evolution of the type of osteoarthritis that occurs commonly in aging individuals. Ultramicroscopic, histochemical and microanalytical methods will be used for the study.

A $12,000 renewal grant to Dr. Margaret G. Smith, professor of pathology, will be used to continue an investigation of some of the mechanisms of infection of cells by viruses. The strains of the salivary gland virus which produce disease in the mouse and the one which produces disease in man are being employed. These viruses are grown in tissue cultures, and the progressive changes produced in cells of the culture after exposure to the virus are being studied by electron microscopy, by the use of fluorescent stain and by the use of radio active thymidine. The salivary gland virus disease of infants will also be studied.

Dr. Robert D. Lange, assistant professor of medicine, has been awarded $9,657 for a study of the causes of the anemia which develops in patients suffering from the presence of urinary constituents in the blood. It will also support research on a phase of red blood cell productions and hemoglobin formation.

A $2,760 renewal grant to Dr. Bernard Shore, instructor in physiology, will be used to study by chemical and physical means, the structure and metabolism of the lipoproteins of human blood serum. These macromolecules are related in some manner to heart disease, and it is possible that this research will help increase an understanding of this disease.

A $17,270 renewal grant to Dr. H. L. White, professor and head of the department of physiology, supports a current study of how the kidneys handle water and salt and on the movements of water and salt in tissues in response to salt depletion, to hemorrhage and to endrocrine and other influences.

Dr. Robert O'Neal, assistant professor of pathology, received a $14,190 renewal grant to continue research on the vascular disease, a form of arteriosclerosis that is produced in animals by a diet deficient in pyridoxine or vitamin B6. This mild form of arteriosclerosis will be used as a basis for determining whether or not other factors such as high blood pressure and diets with a high fat content have an aggravating effect on the arteriosclerosis produced in this manner.

A $13,984 renewal grant to Dr. Paul Berg, associate professor of microbiology, supports an analysis of the way in which the human cell assembles amino acids into complex structures and how this process is controlled by the genetic mechanism of the cell. Each protein of living cells is composed of some twenty different amino acids linked one to another in a precise order. The biological function of proteins depends on not only this sequential order, but also on the way such amino acid chains become folded into certain shapes.

Dr. James L. O'Leary, professor of neurology, was awarded a $13,375 renewal research grant. Recent advances in the study of electrophysiology of the cerebral cortex of the brain have made imperative immediate reevaluation of the structure of the large field of cortical gray matter of brain where research developments have been proceeding most rapidly. The investigation is focusing upon the important frontal region of the monkey, but includes other species as well. The study is slanted toward detection of differences between animal species related to the sensory and motor versatility of the forearm and hand. The $35,125 renewal training grant, also awarded Dr. O'Leary, implements the nationwide program of research and clinical training in the neurologic sciences. Both types of training are provided, including research at Washington University Medical School and clinical training at Barnes Hospital and St. Louis City Hospital.

The School of Medicine received a $50,000 re-

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VIGRAN CHEWABLES *taste like candy*, but contain *no ingredients harmful to teeth.* Important, too, is that VIGRAN CHEWABLES *dissolve easily* in the mouth and *smell good.* These advantages will also appeal to your elderly patients. And VIGRAN CHEWABLES provide at least 125% of the minimum daily requirements for vitamins A, D, B_1, B_2, niacinamide and C, and significant amounts of other essential vitamins.

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Vitamin D	1,000 U.S.P. units
Vitamin C	75 mg.
Vitamin B_1	3 mg.
Vitamin B_2	3 mg.
Vitamin B_6	2 mg.
Niacinamide	25 mg.
Calcium Pantothenate	3 mg.
Vitamin B_{12}	5 mcg.

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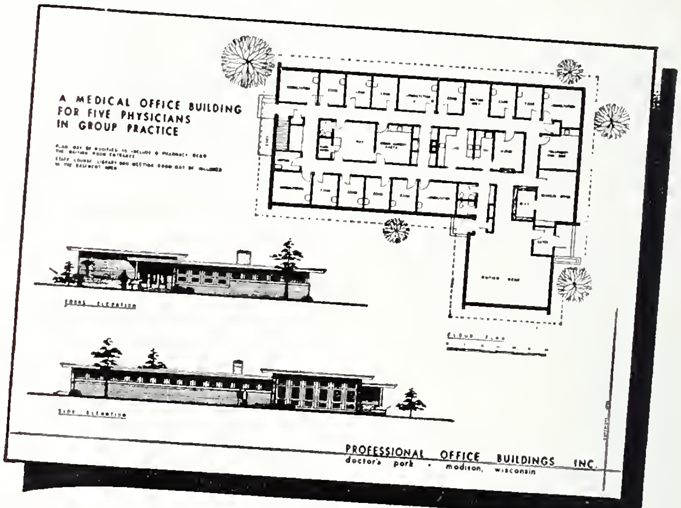
newal grant for scholarship and fellowship aid for medical students and a $5,184 renewal grant for medical student part-time research fellowships. The School of Medicine has received a $34,335 in extensions of research contracts from the U. S. Army.

A $17,816 contract to Dr. Neal S. Bricker, head of the renal division in the department of internal medicine, will support studies to expand knowledge regarding diseases of the kidney and the abnormalities which result. Widespread occurrence of kidney disease in the general population represents an important cause of incapacitation and mortality. Technics have been developed for producing different forms of kidney disease in the experimental animal, and in each animal, the disease is produced in one kidney; the opposite kidney is maintained intact as a control. Detailed studies of the changes disease causes in kidney function and structure are being investigated. Such information may lead to clarification of the abnormalities which the patient develops in chronic progressing kidney diseases and, ultimately, to improved concepts of treatment.

Dr. Eric Reiss, assistant professor of medicine and preventive medicine, received a $14,057 contract extension; Dr. Robert E. Shank, Danforth professor and head of the department of preventive medicine, $2,462. Serious disturbances in protein metabolism are characteristic of severe infections, burns and other forms of injuries. Research in the preventive medicine department is concerned with attempts to explain some of the mechanisms by which illness impairs protein metabolism, and the means by which the growth hormone and cortisone produce their effect on protein metabolism.

Alumni Honored

Major General Oliver Kunze Niess, who was graduated from Washington University Medical School in 1927, has been named Surgeon General of the United States Air Force. The appointment became effective December 1. General Niess received his commission as a first lieutenant in the regular Army in 1928, following his internship at Fitzsimons General Hospital, Denver. In 1954 he was assigned as command surgeon of Far East Air Forces in Tokyo, Japan. He achieved the rank of Brigadier General in August of 1953 and Major General in August of 1957. When Far East Air Forces were disestablished on June 30, 1957, he became command surgeon of the newly established Pacific Air Forces with headquarters at Hickam Air Force Base, Hawaii. He has been honored for his assistance in medical matters by the governments of Thailand, Philippine Islands, Republic of China and the Republic of Korea.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Missouri Medicine in Review

(Continued from page 192)

pointed Dr. F. B. Fuson of Springfield to fill the unexpired term.

Dr. Roland Hill of St. Louis was elected president of the Western Surgical Association at its last annual meeting.

The 1919 session of the association will be held at Kansas City and Dr. Howard Hill of Kansas City has been appointed chairman of the committee on arrangements.

Dr. H. M. Delameter, health officer of St. Joseph, makes the following recommendations in his annual report to the health department of that city: the passage of a food ordinance, establish a memorial hospital for soldiers and sailors, measures to control veneral diseases, pasteurization of milk sold in the city, teaching hygiene in the senior grade of high school, increase of funds for the maintenance of a hospital for tuberculosis, and for the removal of garbage.

TWENTY-FIVE YEARS AGO

The State Board of Health reelected its former officers at a meeting in Jefferson City, January 16. The officers are: President, Dr. Emmett P. North, St. Louis; vice president, Dr. P. T. Bohan, Kansas City, and secretary, Dr. E. T. McGaugh, Richmond.

Dr. Frank R. Teachenor, Kansas City, was elected president of the Western Surgical Association at the annual meeting in Cincinnati, December 8 and 9. Dr. Thomas G. Orr, Kansas City, was elected treasurer.

The Barnard Free Skin and Cancer Hospital, St. Louis, received a bequest by the terms of the will of the late Mrs. Mary L. Barnard. The hospital was founded by her late husband, Mr. George D. Barnard. Mrs. Barnard made several bequests in her will and the rest of the estate was left to the hospital. She has made yearly contributions to the hospital since the death of her husband in 1916.

The Southeastern Surgical Congress will hold its fifth annual assembly in Nashville, Tennessee, March 5, 6 and 7. Hotel headquarters will be in the Andrew Jackson Hotel, and lectures and exhibits will be in the War Memorial Building. Among the speakers will be Drs. Vilray P. Blair and J. B. Brown, St. Louis, and Arthur E. Hertzler, Halstead, Kansas.

Dr. Anton Elschnig, Prague, Czechoslovakia, will give a course in ophthalmology in St. Louis, February 13 to 17 inclusive, under the auspices of the Ophthalmic Section of the St. Louis Medical Society and the St. Louis Ophthalmic Society.

Approximately a thousand physicians are cooperating with the Municipal Health Division of the St. Louis Health Department in a campaign to bring diphtheria under control, according to Dr. Paul J. Zentay, assistant health commissioner. Last year there were 768 cases of diphtheria and 31 deaths.

TEN YEARS AGO

The Ninety-first Annual Session of the Association will be held in Kansas City, March 27 to 30, in the Municipal Auditorium. Luncheon and dinner meetings will be held in Hotel President.

Wallis Smith, M.D., Springfield, was a guest speaker at the annual installation of officers dinner meeting of the St. Louis County Medical Society on December 12.

Joseph C. Jaudon, M.D., St. Louis, was elected president of the Washington University Medical Society at an annual session on December 8. A. N. Arneson, M.D., St. Louis, was elected a member of the council.

Robert E. Schlueter, M.D., St. Louis, was made Honorary Librarian for Life of the St. Louis Medical Society at the annual meeting of the Society held on January 4.

BOOKS RECEIVED

Love, Skill and Mystery, a Handbook to Marriage, by Theodor Bovet. Doubleday & Company, Inc., New York. 1958. Price $3.50.

Memoirs of a G.P., By Otis Marshall, M.D. Vantage Press, New York, Washington, Chicago and Hollywood. 1958. Price $3.50.

Fifty Years of Neurosurgery, A Personal Story by Ernest Sachs, M.D. Vantage Press, New York, Washington, Chicago and Hollywood. 1958. Price $3.50.

Clinical Obstetrics and Gynecology. A Quarterly Book Series. Volume 1, Number 2. Paul B. Hoeber, Inc., Medical Book Department of Harper & Brothers, New York. 1958. Price $18.00 a year.

How to Live With Diabetes, by Henry Dolger, M.D., Chief, Diabetes Clinic, Mt. Sinai Hospital, New York; and Bernard Seeman. W. W. Norton & Company, Inc., New York. 1958. Price $3.50.

Cancer and the Atomic Age, by Clement A. Tavares, M.D. Vantage Press, New York, Washington, Chicago and Hollywood. 1958. Price $3.50.

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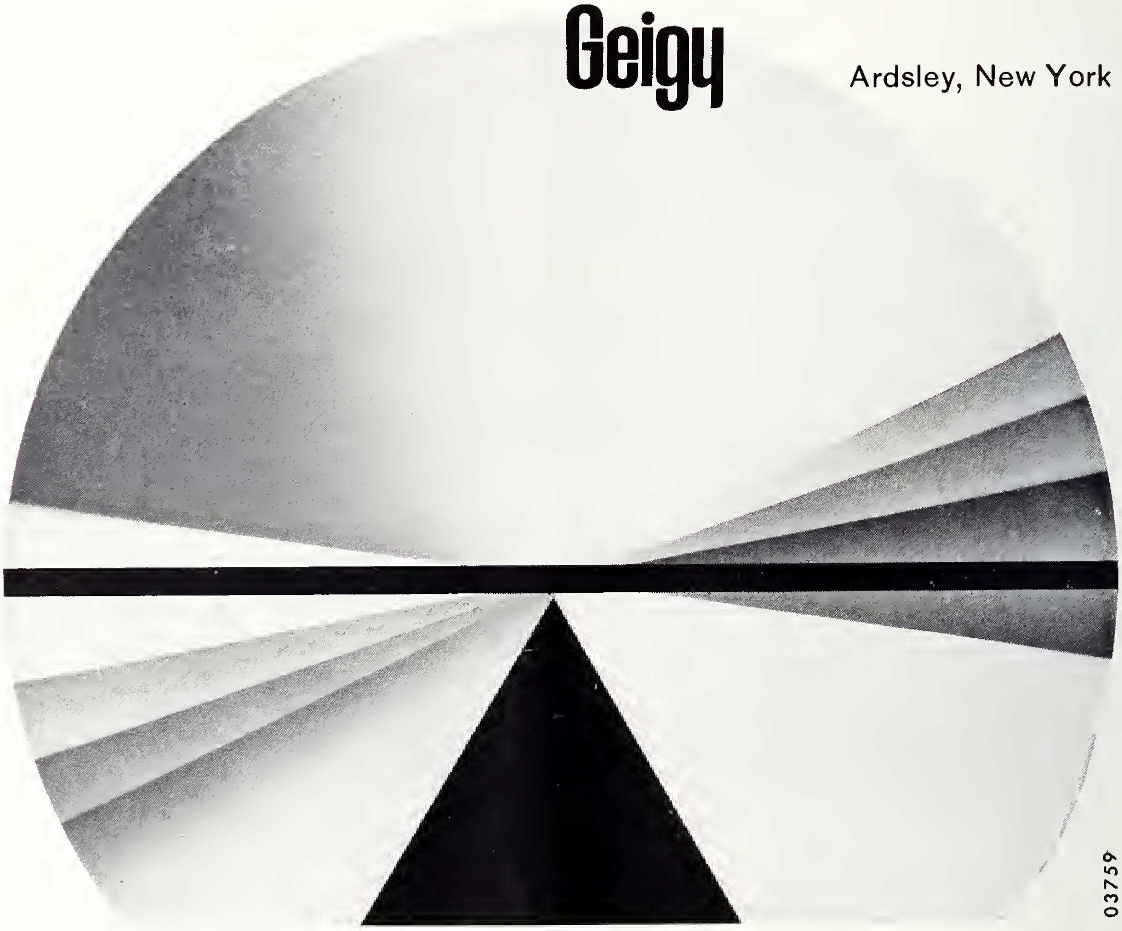

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Reasons for Failure:

1. Treatment discontinued too soon (percentage of patients improved increases substantially after first six months).
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Plaquenil sulfate is supplied in tablets of 200 mg., bottles of 100.

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BOOKS RECEIVED

The Psychology of Medical Practice, by Marc H. Hollender, M.D., Professor and Chairman, Department of Psychiatry, State University of New York, Upstate Medical Center, and Director, Syracuse Psychiatric Hospital. W. B. Saunders Company, Philadelphia. 1958. Price $6.50.

The Neuroses and Their Treatment, edited by Edward Podolsky, M.D., Department of Psychiatry, Kings County Hospital, Brooklyn, New York; Psychiatrist, Boro Medical Center, Brooklyn, New York. Philosophical Library, New York, 1958. Price $10.00.

Practical Use of the Office Laboratory and X-Ray Including the Electrocardiograph, by Paul Williamson, M.D. The C. V. Mosby Company, St. Louis, 1957. Price $10.75.

Pathology, edited by W. A. D. Anderson, M.D., Professor of Pathology and Chairman of the Department of Pathology, University of Miami School of Medicine; Director of the Pathology Laboratories, Jackson Memorial Hospital, Miami, Florida. Third Edition. The C. V. Mosby Company, St. Louis. 1957. Price $16.00.

A Manual of Pharmacology and Its Applications to Therapeutics and Toxicology, by Torald Sollman, M.D., Professor Emeritus of Pharmacology and Materia Medica, School of Medicine, Western Reserve University, Cleveland, Ohio. Eighth Edition. W. B. Saunders Company, Philadelphia. 1957. Price $20.00.

Ciba Foundation Symposium on the Cerebrospinal Fluid Production, Circulation and Absorption, by G. E. W. Wolstenholme, M.B., B.Ch.; and Cecilia M. O'Connor, B.Sc. With 141 illustrations. Little, Brown and Company, Boston. 1958. Price $9.00.

Clinical Enzymology, by Gustav J. Martin, Sc.D., Research Director, The National Drug Company, Philadelphia. Little, Brown and Company, Boston. 1958. Price $6.00.

Therapeutic Exercise for Body Alignment and Function by Marian Williams, Ph.D., Assistant Professor of Physical Therapy, Department of Allied Medical Sciences, School of Medicine, Stanford University; and Catherine Worthingham, Ph.D., Director of Professional Education, The National Foundation for Infantile Paralysis, Inc. Exercise Illustrations by Harold Black. W. B. Saunders Company, Philadelphia. 1957. Price $3.50.

Ciba Foundation Symposium on the Chemistry and Biology of Mucopolysaccharides, by G. E. W. Wolstenholme, M.B., B.Ch., and Maeve O'Connor, B.A. 48 Illustrations. Little, Brown and Company, Boston. 1958. Price $8.50.

LETTERS
TO THE MEDICAL DIRECTOR

Dear Doctor:

Rauvera* was used on five patients with essensential hypertension varying from moderate to severe. The highest blood pressure was 220/130 and the lowest 180/105.

All patients have shown a consistent response to the drug and the continuation therapy has effected a good control so far . . . approximately two to three months. In four patients systolic blood pressure was reduced from 20 to 50 mm. Hg and the diastolic from 10 to 15 mm. One patient, who had a pressure of 220/130 has had a phenomenal response, and I brought the systolic down to 165 and the diastolic to 95.

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Dear Doctor:

Rauvera has produced satisfactory reductions of blood pressure in every hypertensive case in which I have used it.

M. D., Colorado

Dear Doctor:

Rauvera tabs are my choice for hypertension over 170 . . . they give me the best results.

M. D., Texas

Comment: *It is interesting to note that no adverse side effects were reported in connection with Rauvera's effective antihypertensive action.*

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Curiosa et Trivia

Before you bet on the validity of your blood type on your WW II dog tag, recheck it. Nearly 10 per cent of them are wrong!

Tests show that over one-fourth of surgeons' gloves are punctured after one laparotomy.

Although no major problem any longer in the general population, airsickness is five times more frequent among women than among male passengers.

Spiders who ingest the serum of schizophrenics show irregularities in their behavior, especially in their web pattern.

Bees, including hornets, wasps and yellow jackets, account for more deaths in the U. S. than rattlesnakes.

Even as you and I, animals pay the penalty for being surrounded; caged animals have a significantly higher incidence of arteriosclerosis than those in their native state.

Capsule Clinics

- The children of approximately 75 per cent of color-matched parents were of the same color as the parents. Of the remaining 25 per cent, 7 per cent of infants were lighter and 18 per cent were darker than the parents. About 40 per cent of infants born to parents of dissimilar color were as dark as the darker parent, while 55 per cent were lighter than the lighter parent. Fewer than 5 per cent were darker than the darker parent. Horton, C. P. and Crump, E. P., J. Pediat. 52:547, 1958.

- Rectal administration of hydrocortisone produced good clinical results in patients with chronic ulcerative colitis. The steroid was given daily in a dosage of 200 mg. dissolved in 100 cc. normal saline solution. Treatment was continued for two weeks. There was no significant increase in hydrocortisone blood levels in treated patients. This would indicate that clinical response was due to a local steroid effect on the mucosa at the colon. Schwartz, R. D., et al., Proc. Soc. Exp. Biol. and Med., **97**:648, 1958.

From the Francis Roberts Agency, New York.

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WASHINGTON

For some time it has appeared to the medical profession that its chances in the Congress were a gamble and a bill recently introduced in the Congress gives an excellent talking point for this premise. True, it cannot influence Missouri unless some arrangement would be made to go across the borders of the state—as is done to attend horse racing. H.R. 532 provides for a federal lottery to raise funds for federal hospitals, the blind, recipients of old age assistance and disabled veterans. The bill would create a five-man Federal Lottery Commission to be appointed by the President with the consent of the Senate. "From time to time" the commission would conduct a lottery by selling tickets and awarding prizes to winning participants who would be "determined by drawings made by prominent persons designated by the commission." Any balance after prizes, expenses and repayment of the initial appropriation would be paid to the recipients named, in areas where tickets can be sold. The bill provides that the sale of the lottery tickets would be prohibited in states in which such sale is illegal.

The aged and veterans are under other considerations in the national legislature, including proposed grants for studies and projects for the aged under a Bureau of Senior Citizens within the Department of Health, Education and Welfare with an advisory committee. It has been proposed that the "presumption of service connection" be extended for veterans with multiple sclerosis, leprosy, disabilities and tuberculosis.

HEALTH INSURANCE FOR FEDERAL EMPLOYEES

The expected bill to furnish health insurance for federal employees was introduced early in January and was referred to the Committee on Post Office and Civil Service. It would provide for government contribution toward personal health service benefits for civilian officers and employees in the United States service and their dependents and authorize payroll deductions for participants. It would establish a voluntary health insurance program, the plans to be full service, indemnity, employees' association or group practice.

MEDICINE IN AVIATION

It now appears that the Federal Aviation Agency has decided to set up a strong medical department under medical direction. Previously it had seemed that medical functions would be in lay hands with the Civil Air Surgeon serving more or less as window dressing. That there is a change in thinking is shown by an administrative order specifying that the Civil Air Surgeon shall be responsible for assisting administrator flying personnel and air traffic controlees in conducting examinations, in taking initiative to further research in aviation medicine and in inaugurating a program of occupational medicine.

FORAND BILL

Aime J. Forand (D., R. I.) had not reintroduced the bill on hospital and surgical benefits in the early part of the Congressional session, but it was reported that the bill was being rewritten. It probably will have been introduced by the time of publication of this issue. Representative Forand is a member of the House Ways and Means Committee.

HOUSE COMMERCE COMMITTEE

Much public health and medical legislation is handled by the House Commerce Committee. In 1957-1958 this committee included a physician, Rep. Will Neal (R., W. Va.), but he was defeated in the November elections. The first physician on the Senate rolls in nearly a generation, Dr. Gruening, is serving on the Interior and Public Works committees as well as Government Operations of the Senate.

APPROPRIATIONS

The Public Health Service is spending $2 million on public health traineeships and nearly $6 million on nursing traineeships, both at the graduate level. The budget makes no provision for continuation but it is felt that the money requisition was deferred presumably to help hold down the size of the budget sent to the Congress. The present provision expires this June. It is reported that the chairman of the committee handling HEW's funds bill will sponsor legislation extending these programs for five years.

Included in the Food and Drug Administration's budget is $626,000. The department's work load is expected to include inspection of some 21,500 establishments and collection of 43,000 samples for scrutiny.

ACUTE ILLNESS STUDY

In the most recent publication of the U. S. National Health Survey series, PHS No. 584-B6, incidence of acute illness between July 1957 and June 1958 is reported. This was based on household interviews in various parts of the country covering 115,000 individuals in 36,000 families. It estimates 438 million acute illnesses—65 per cent of them respiratory—were experienced by the American population in this 12 month period. Restricted activity included 219 million days lost from work and 196 million days lost from school.

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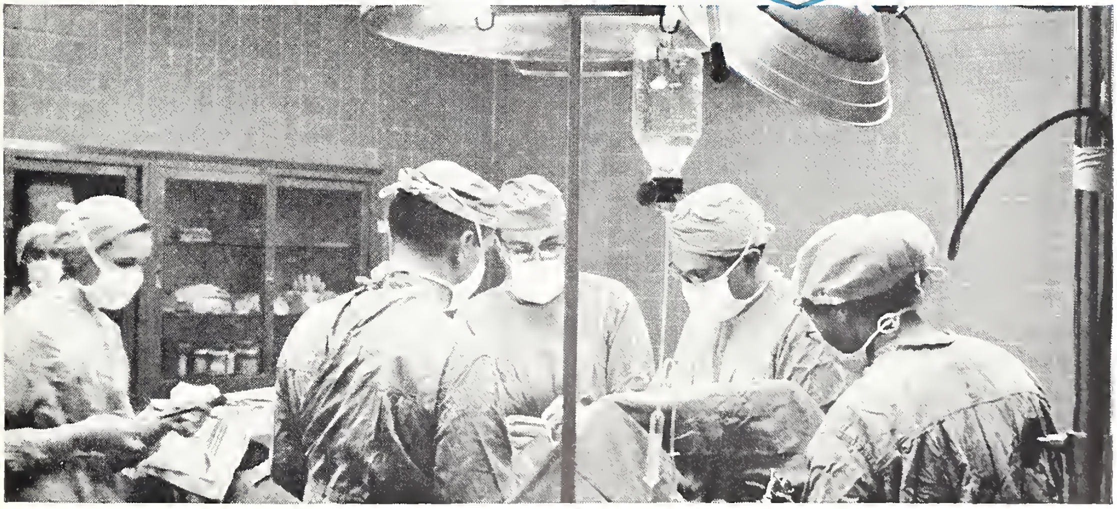

Across Missouri

Double duty may fall on a new physician member of the Missouri Legislature. Luke A. Knese, M.D., St. Louis, was named honorary physician of the House in a resolution adopted in the early part of the session.

Chemical and allied products led investments in new industries in Missouri during the last year. According to figures released by Governor Blair, Missouri in the last year obtained 285 new industries, representing 12,970 new jobs and an added payroll of $31,891,483.

It is expected that another "Little Hoover" recommendation may appear in the legislature, establishing a central management agency to bring uniformity in operating procedures of state agencies. Some of the "Little Hoover" recommendations that have been put into effect are an expanded budget staff directly under the Governor's office, a straight line purchasing set-up under the comptroller and a long range planning system for new buildings, also under the comptroller.

It was reported that the Governor recommended passage of a single licensing law (now S.B. 50) in his address to the Legislature. That portion of his address which dealt with this subject follows:

"Progress and research in medicine and the practice of medicine and surgery in the State of Missouri have reached new plateaus in recent years. For these great contributions by our physicians and surgeons, the people of Missouri should, and I am confident they do, feel great pride. In recent years, physicians and surgeons of both the allopathic and the osteopathic schools of medicine have demonstrated a willingness to labor together toward even greater progress in the struggle against disease and human suffering, and with their efforts have come new successes, a fresh approach and new visions toward a healthier Missouri.

"I am informed that both the Missouri State Medical Association and the Missouri Association of Osteopathic Physicians and Surgeons will sponsor legislation at this session which will modernize present practice acts for both schools of medicine into one act and one standard for the practice of medicine and surgery in the state. Just as it is necessary to reconstruct and modernize our statutes to keep abreast the changing trends in other endeavors, it should be necessary and important toward the welfare of our people for the legislature to assist our physicians and surgeons with new legislation. I have seen the legislation which the physicians will introduce. It is sound and it is good. It will give the assurance that a man licensed by the new State Board of Registration for the Healing Arts in Missouri is qualified and it creates a single standard for all physicians so licensed. It pertains only to those physicians and surgeons who hold either the M.D. degree or the D.O. degree. I heartily endorse this legislation and I recommend that the General Assembly do likewise in the interest of a healthier and happier people in the State of Missouri."

While traffic deaths in the nation at large dropped from previous years, those in Missouri were higher than last year. Bills to tighten traffic laws were introduced in the legislature. The bills would establish a point system of merits and demerits for drivers, to be noted on their driving licenses, provide for blood tests for suspected drunken drivers, make sentences much stronger for those convicted for drunken driving. The bills also would regulate trailers and place traffic offenders 16 years of age and over in the municipal traffic courts instead of before juvenile judges. There are eight bills dealing with this subject and it appears that some may have emergency clauses in view of the mounting death toll from traffic accidents. A bill with such a clause becomes law upon being signed by the Governor. Also in the traffic field, a bill has been introduced requiring insurance companies planning to raise motor car rates to post a notice with the state insurance superintendent.

The Senate appropriations committee is taking a close look at the amount of delinquent taxes due the state. Probably measures will be taken to plug loopholes in present collection methods. The income tax division in 1958 turned over 19,468 delinquent accounts to the attorney general for collection. Amounts due on the accounts totaled $701,619 and another $169,607 was added for penalties. The cigarette tax division reported $250,000 due in taxes.

in peptic ulcer

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CASES
RESPOND TO

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Activity appears to be restricted to the desired site of action.
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References: 1. Finkelstein, Murray: Journal of Pharmacology and Experimental Therapeutics, in press. 2. Winkelstein, Asher: Paper in preparation.

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REFRACTORY CASES RESPOND

Single Licensure Among Bills Introduced

T. R. O'Brien

Bulletins to the membership will be used when necessary to give up to the minute information on legislation and this digest of bills of interest to the medical profession is to give general information.

SINGLE LICENSURE BILL

S.B. 50, the single licensure bill as approved by the House of Delegates and the Council of the Association, was introduced in the Senate on January 14 by Senators Noble, Kinney, Patterson, Blackwell, Crain, Hawkins, Cox and Curtis. The preface of the bill reads: "To repeal Sections 334.010 to 334.220, inclusive R.S.Mo., being all of Chapter 334, relating to practitioners of medicine, surgery and midwifery, and to repeal Sections 337.010 to 337.090, inclusive, R.S.Mo., being all of Chapter 337, relating to practitioners of osteopathy, and to enact in lieu thereof twenty-two new sections relative to the practice of the healing arts in the State of Missouri, creating a state board of registration for the healing arts, providing for the licensing of all physicians and surgeons and the biennial registration of physicians and surgeons and midwives, and granting to said board of registration for the healing arts authority for supervision and regulation of the professions licensed and registered by it, with penalties for the violation of the act.

IN THE LEGISLATURE

ATOMIC ENERGY COMMISSION

S.B. 6 establishes a commission on atomic energy, to be composed of five members of the Senate, five of the House and nine from the community at large. The commission is to serve in an advisory capacity to the Governor and General Assembly in regard to activities and opportunities in the field of nuclear energy; follow developments in the field, study existing laws and regulations, establish a clearing house of information, determine existing state departments' and agencies' responsibilities for atomic energy matters; study insurance and indemification status covering nuclear reactor installations and other matters related to atomic energy. It is to report to each regular General Assembly. This was referred to the Committee on State Departments.

S.B. 13, the same bill as H.B. 1 which passed the House as introduced and was referred in the Senate to the Committee on Public Health, enacts the so-called "vendor" program. The bill conforms in general to the wishes of the MSMA House of Delegates in that hospitalization for inpatients with medical emergencies or acute serious illnesses is provided. In addition, payments to nursing homes is authorized for bedfast, totally disabled persons, not to exceed $100 per month per recipient. A medical advisory committee to the Department of Welfare is authorized, however, it is on a permissive rather than a mandatory basis. In that respect the bill differs from action of the MSMA House of Delegates. Efforts will be made to provide the committee on a mandatory basis.

A series of bills relates to public assistance. S.B. 14 deals with the blind and would raise monthly blind pensions from $60 to $65. S.B. 15 would raise the maximum annual income excluding blind persons from pension from $2,100 to $2,400. S.B. 16 would raise the income by the same amount but relates to state-federal aid to the blind. S.B. 17 would provide the $65 a month instead of the $60 and provides that this be used in preparation of the budget to obtain federal aid to the blind. All were referred to the Committee on Public Health and Welfare.

S.B. 18 would authorize the head of a state mental hospital to place suitable patients in suitable boarding or family homes, the costs to be met out of the state hospital funds. This was referred to the Committee on Mental Health. S.B. 19 would place maternity hospitals under the Division of Health for licensing purposes. S.B. 20 cancels the present statute which provides for inspection by the Department of Welfare. These were referred to the Committee on Public Health and Welfare.

S.B. 24 repeals sections relating to the definition of chiropractic, and the powers, duties of the State Board of chiropractors and enacts five new sections. The bill redefines chiropractic, gives State Board of Chiropractors discretion in defining qualifications of a chiropractic school, raises required course from three to four years and hours of instruction from 2,040 to 4,000 hours, redefines subject of study, raises various fees, gives Board power of subpoena and enforcement, right to hire attorneys and raises board members per diem from $10 to $25.

S.B. 135, relating to radiation protection, provides that the Division of Health may formulate and promulgate rules and regulations including registration of sources of radiation, and study, investigate and advise upon radiation hazard problems. It shall have power to abate such hazards.

(Continued on page 340)

Allergy-free...all day...
with this much medication

Typically, the allergic patient can enjoy a whole day's freedom from symptoms with just one Pyribenzamine Lontab in the morning—a whole night of restful sleep with just one Lontab in the evening.

The outer shell of the unique Lontab actually contains an effective dose of Pyribenzamine which is released minutes after the Lontab enters the stomach. Thereafter, medication is released uniformly and continuously from the specially formulated inner core of the Lontab—sustaining antiallergic effect as long as 12 hours.

For patients who need only periodic medication, regular Pyribenzamine tablets provide fast, dependable action, with a minimum of undesirable side effects.

SUPPLIED: Pyribenzamine Lontabs—full-strength—100 mg. (light blue). **Pyribenzamine Lontabs**—half-strength—50 mg. (light green); for children over 5 and adults who require less antiallergic medication. **Pyribenzamine** Regular Tablets, 50 mg. (green, scored) and 25 mg. (green, sugar-coated).

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Missouri Division of Health

H. M. Hardwicke, M.D., *Acting Director*

MISSOURI PUBLIC HEALTH LABORATORIES

Fifty years ago, one of the great public health problems resulted from the fact that there were few acceptable private laboratories to whom physicians might send specimens for bacteriologic and serologic examination.

In April, 1906, the State Board of Health appointed Dr. Guthrie McConnell, of St. Louis, as state bacteriologist. The first state laboratory was located in St. Louis.

The services rendered to the physicians of Missouri as well as public health workers have been extended from the early days of water analysis, tuberculosis, diphtheria, and malaria laboratory examinations to complete bacteriologic and serologic services; chemistry of food, drugs, waters, stream pollution, air, gases, and fumes; toxicology; rabies examinations; serology of syphilis; mycology; and the isolation of poliomyelitis, influenza and other viruses.

The work load of the public health laboratories in the fields of serology and bacteriology has grown tremendously during the past years. More than 70 different types of examinations are now performed in the Division of Health laboratories. Appropriations for the operation of the laboratories have not increased proportionately to the increased load. It has, therefore, been necessary for the Division of Health to neglect some purely public health laboratory procedures in order to continue to render laboratory services as requested by practicing physicians.

The number of private laboratories has increased materially. It is now possible for almost all practicing physicians in the State of Missouri to send laboratory specimens to private laboratories and receive reports as promptly as they would from public health laboratories. The Division of Health, therefore, requested the Council of the Missouri State Medical Association to review this problem and make recommendations.

A special committee appointed by the Council of the Missouri State Medical Association recommended to that Association that whenever possible physicians in private practice should make arrangements with private laboratories for their routine bacteriologic and serologic work. In keeping with this recommendation, each report returned to physicians from the Division of Health will carry a reminder that these physicians should, when possible, make arrangements for such work with private laboratories.

The Division of Health laboratories will continue to perform procedures for the identification of enteric organisms, virus infections, and other determinations which are not available at this time from private laboratories. The Division of Health will also continue to do prenatal and premarital serologies as indicated or required under the premarital and prenatal examination law.

The majority of serologies submitted to the Division of Health during the last year were submitted by practicing physicians. If these physicians in the future will make arrangements to have such routine serologies done by private laboratories, the laboratories of the Division of Health will be freed for routine water, sewage and other public health procedures.

The practice of laboratory medicine is a part of the total practice of medicine. Physicians should not require that it be usurped by an agency of government unless this procedure is necessary. The Missouri Society of Pathologists in the state have agreed that laboratory procedures submitted to them will be done without charge when the submitting physician indicates that the patient is indigent. Private laboratories will provide specimen containers for the use of physicians practicing in this state. The Society of Pathologists will also supply lists of acceptable private laboratories to any physician requesting them.

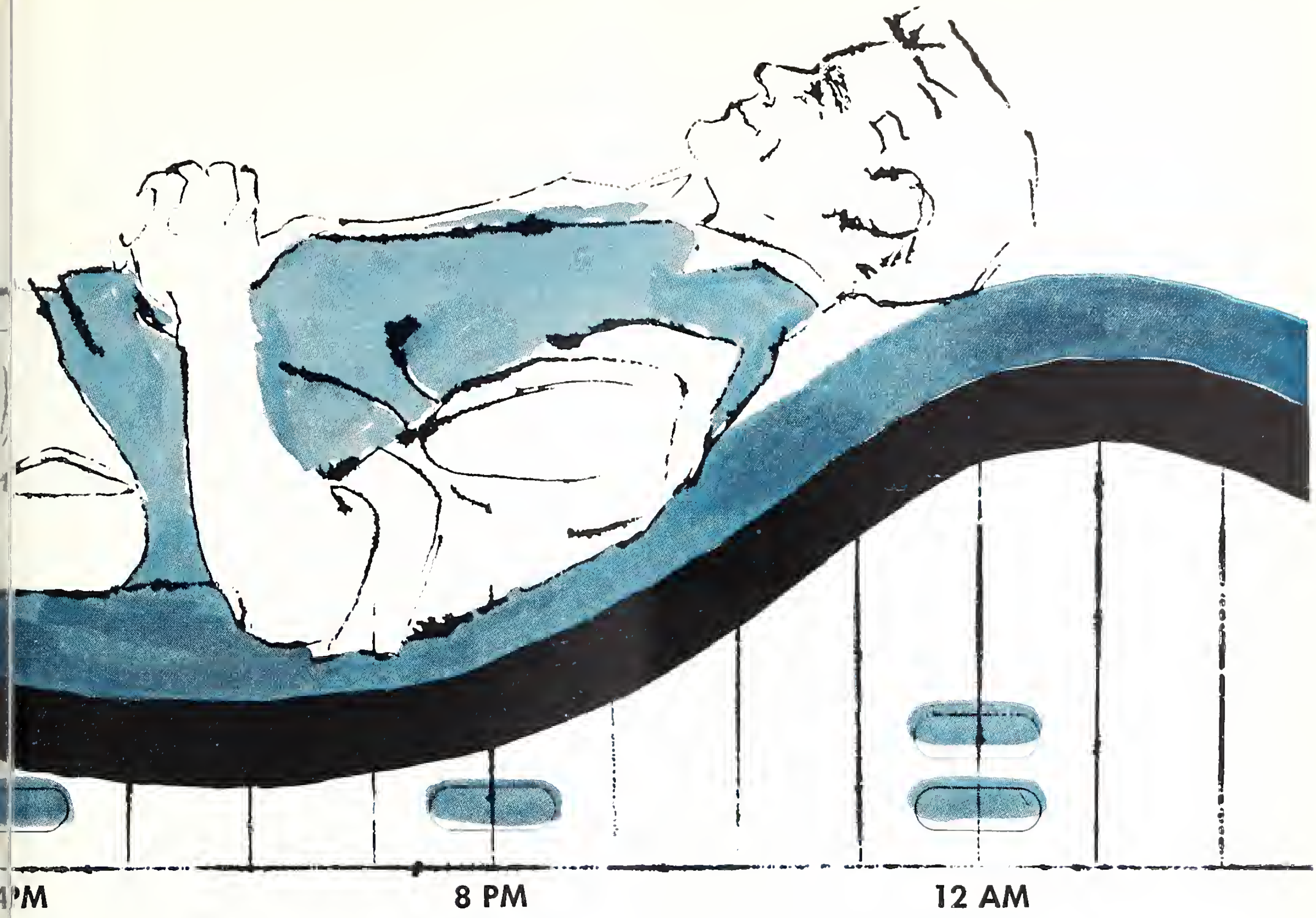
The Division of Health sincerely hopes that each practicing physician in this state will give this request sincere consideration.

MEDICAL SECRETARIES TO MEET

The Missouri State Medical Secretaries and Assistants' Society will hold its annual meeting at the Chase-Park Plaza Hotels in St. Louis, April 25-26, 1959. Mrs. Etta Young, Secretary to Claude Hunt, M.D., Kansas City, is president of the organization.

An outstanding feature of the meeting will be an educational program to be presented on April 25, 1959, in the form of round-table discussions. Well known and well informed speakers will be presented on subjects of interest to the staffs of the physicians of the state. The program will begin promptly at 9:00 a.m. and continue throughout the day.

Miss Mildred White, R.N., c/o E. H. Parsons, M.D., 457 North Kingshighway, St. Louis 8, Mo., is in charge of arranging the program.



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The **right** dose of the **right** potency at the **right** time.

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For mild to moderate pain

Each capsule contains:

Phenacetin (3 gr.)	194.0 mg.
Acetylsalicylic acid (2½ gr.)	162.0 mg.
Phenobarbital (¼ gr.)	16.2 mg.
Hyoscyamine sulfate	0.031 mg.

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Phenaphen with Codeine Phosphate ¼ gr. (16.2 mg.)

For moderate to severe pain

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Phenaphen with Codeine Phosphate ½ gr. (32.4 mg.)

For severe or stubborn pain

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Phenaphen with Codeine Phosphate 1 gr. (64.8 mg.)

For stubborn or intense pain—to obviate or postpone use of morphine or addicting synthetic narcotics

DOSAGE: One or two capsules as required.

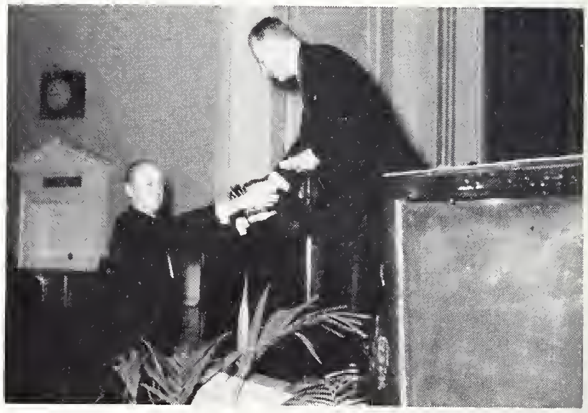
Missouri Academy of General Practice

John F. Pearl, M.D.

Local chapters of the State Academy have been busy recently with special activities. The Southwest Missouri Chapter in cooperation with the Missouri Chapters of the American Trudeau Society and the American College of Chest Physicians sponsored a symposium on Chest Diseases at the Missouri State Sanatorium in Mount Vernon on Saturday night, January 17, and all day Sunday, January 18. Approximately 75 physicians from over the state attended a part or all of this outstanding weekend scientific presentation. The program was quite varied in context, including one clinical pathologic x-ray conference, a panel on "How Can the Sanatorium Best Serve General Practitioners?," and a number of fine talks by outstanding speakers in the chest field from both instate and out. A good number of Academy members of the Southwest Missouri Chapter attended the session and you will note in the accompanying picture three of the officers of the chapter in an important huddle solving (we hope) an important problem. These officers are Dr. M. L. Gentry, Springfield; Dr. T. M. Macdonnell, Marshfield, and Dr. Doyle C. McCraw, Bolivar.

Three officers of the Southwest Chapter of MAGP discuss a problem.

The St. Louis Chapter of the Academy honored one of its members on Tuesday night, December 6, as he was installed as president of the St. Louis Medical Society. During the Society installation ceremonies, Dr. Charles A. Molden, St. Louis, president of the St. Louis Academy Chapter, presented Dr. Robert B. Bassett, St. Louis, new president of the St. Louis Medical Society, a tie clasp and chain with the American Academy of General Practice insignia. This was the Academy's recognition to Dr. Bassett in bringing honor to the Academy through his elevation to the presidency of the St. Louis Medical Society. Dr. Delevan Calkins, another member of the St. Louis Academy, was one of the physicians honored with the privilege of escorting Dr. Bassett to the rostrum in the auditorium for his installation.



Dr. Molden presents tie clasp with AAGP insignia to Dr. Bassett.

The Spring Symposium of the St. Louis Academy will be held on Sunday, May 3, at the Chase Hotel, beginning at 1:00 p.m. The program will present four outstanding scientific speakers in the afternoon. The scientific program will terminate with the speakers serving on a panel to answer questions from the audience. A cocktail hour and dinner will conclude an attractive occasion.

The first postgraduate medical education program organized and conducted by the Kansas City Academy of General Practice was held in the staff room at St. Mary's Hospital in Kansas City on Sunday, December 14. This was an intensive one day program slanted to the needs of the general practitioner on electrocardiography. The program was directed toward application implications at the home bed-side level, the office management level and the hospital service level. The guest speaker who presented this program was Dr. Michael Bernreiter, Kansas City, a well known authority in the field of the subject matter presented. The second postgraduate medical education program sponsored and conducted by the Kansas City Academy in cooperation with the Psychiatric Receiving Center of the Greater Kansas City Mental Health Foundation was held at the Psychiatric Receiving Center in Kansas City on Sunday, February 22. This represented another intensive one-day postgraduate course in the field of mental health which is being promoted through joint efforts of the American Academy of

(Continued on page 267)

The dramatic story of SPONTIN can never really begin to be told.

In little more than a year, this potent antibiotic has compiled an incredible record for saving lives—and often, after all other therapy had failed. Majority of successes involved patients critically ill with staphylococcal infections—conditions that had resisted all other known antibiotic therapy.

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The Woman's Auxiliary

As I write this, snow is on the ground but by the time you open the pages of this magazine you will be thinking of spring work and planting. Here are the seeds you should plant to have a garden that produces all the year:

Mrs. Henry C. Bauman

Four rows of peas: Presence, Preparation, Promptness, Perseverance.

Three rows of squash: Squash gossip, Squash indifference, Squash criticism.

Five rows of lettuce: "Let us" obey rules; "Let us" be true to obligations; "Let us" be faithful to duty; "Let us" be loyal and unselfish; "Let us" love one another.

Three rows of turnips: "Turn up" at work; "Turn up" with a smile; "Turn up" with determination to make everything worthwhile.

With thoughts of spring come thoughts of the Missouri State Medical Convention and our Auxiliary convention. The time is April 5, 6, 7 at the President Hotel, Kansas City. The men will have their headquarters at the Muehlebach, but the President is just a block and a half from there so distance will offer no obstacle. The Jackson County women already are working hard to plan a fine convention. Some of the extras are plans to go by bus to visit the new much publicized Truman Library. Now regardless of politics this library is a sight you should see. It is a part of our history and I know you will all enjoy this visit. However, if you really would rather stay in the hotel and play some bridge you will find that the committee has made provision for this also. Another extra will be that we will be privileged to see a portion of the Children's Style Show where our models will be the young daughters of our doctors' families. The Sunday night buffet will be an important event. We hope to show A.M.A.'s newest film "The Medicine Man." We hope to have some outstanding music, too.

The time is drawing near for you to start filling in reports. I know that for many of you this becomes a rather tedious task but there is no other way to survey our achievements and measure our progress and then chart our new activities but through reports.

Now with the starting of the new Congress and the forming of new committees we must again become mentally alert to the progress of medical legislation. Again we should consider the basic concepts involved in this problem. Once Dr. Allman said that all people must remember that "Any government big enough to give you anything you want is big enough to take away everything you have." We must try to convince people and perhaps ourselves also that to appeal to the state is a sign of personal weakness. We must yield to none our independent spirit. In the 85th Congress where 21,000 bills were introduced 704 of them had medical implication. Of the 704, 125 proposed to amend social security. Nineteen or 20 of these bills carried federal subsidization for hospital care. Our hope and plan is now that we have time to gather information enough to prove to the government that this problem can best be handled in other ways than the type of legislation now offered. Through surveys made with support and help from other groups we hope to present to the House Ways and Means Committee what the needs of the aging are in this respect and a plan to meet these needs that will not be a straight road to complete socialization. One type of survey will be the State Whitehouse conferences that are scheduled to take place before 1961 in each state. The federal government has allowed $5,000 to cover the expenses of these conferences to each state. Each governor can handle this as he chooses but we should watch for this and have sympathetic representation if possible.

Another legislative matter under consideration is the problem of Social Security for medical men. The men in the A.M.A. who study this problem carefully say that philosophically social security is socialization. In long range thinking they do not believe that the benefits from such are as much as through private insurance. Considering that 9 out of 10 doctors do not retire until the age of 72 and that the lug to support this fast growing social security program is mounting so fast—35 per cent of the national income will be required to support the bill in 10 years if it increases at the same speed in the next 10 years as it has in the last 10. "It is best for the physicians to keep themselves free from a plan that will eventually take over their freedom. We cannot hold back the socialization plan with one hand and hold out the other to accept its benefits." This is the thinking of the A.M.A. lawyers and deserves deep thought and consideration from us.

Now in closing may I say "Be like the kettle—keep singing—even if you are up to your neck in hot water."

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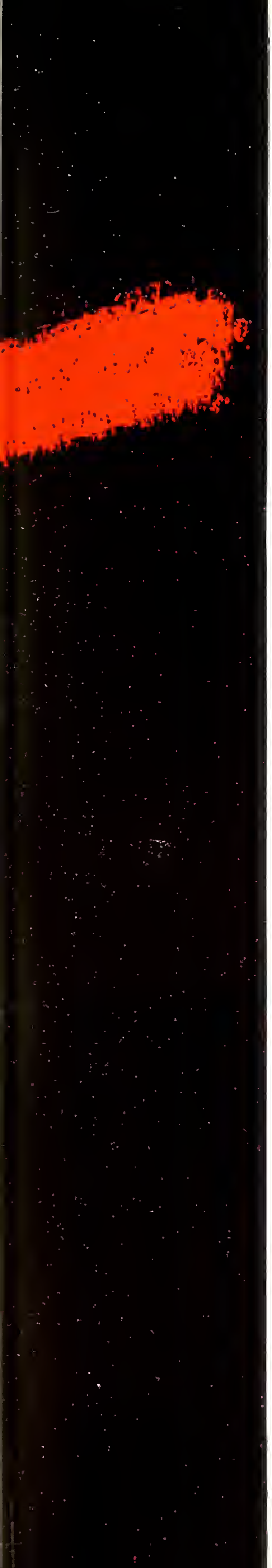

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2. Vinnicombe, J.: Antibiotic Med & Clin. Ther. 5:474, 1958.
3. Sheth, U. K., et al.: Ibid., p. 604, 1958.

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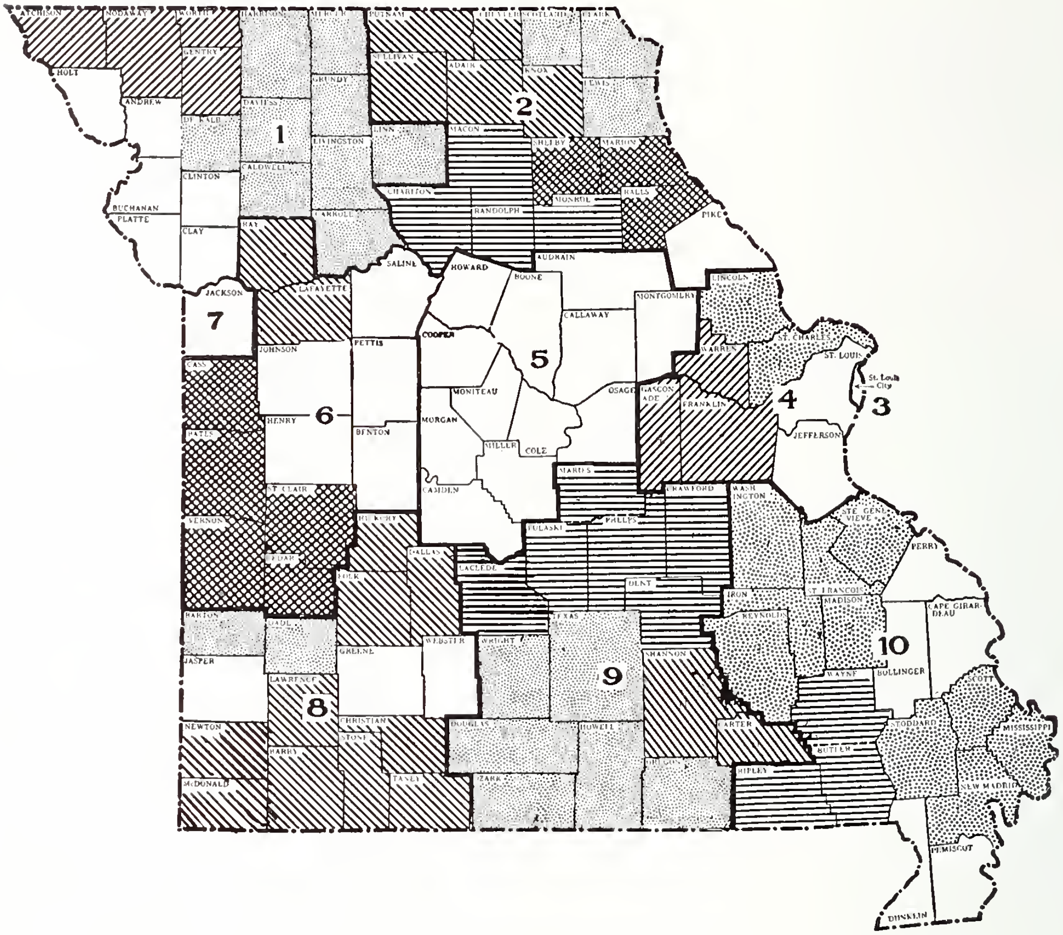

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Missouri Medicine

JOURNAL OF THE MISSOURI STATE MEDICAL ASSOCIATION

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Vol. 56 March, 1959 Number 3

Upper Gastrointestinal Bleeding

Roentgen Aspects

DON C. WEIR, M.D., *St. Louis*

The inestimable value of radiologic examination of the gastrointestinal tract is well known to all physicians. A good gastrointestinal examination is an art requiring the greatest skill and judgment. It should be a combination of careful fluoroscopy, spot films and routine radiographs as indicated for the part being examined. Its major function is locating the pathologic process.

In massive hemorrhage of the upper gastrointestinal tract the radiologist has the primary problem of determining the etiology. In some cases the history may aid in a clinical diagnosis, but in others the bleeding will occur without preceding sign or symptoms.

At the St. Louis City Hospital No. 1 prior to 1950 patients with massive upper gastrointestinal bleeding were not submitted to roentgenographic and fluoroscopic examination until ten to fourteen days after the subsidence of the bleeding. At that time the routine upper gastrointestinal series was performed with palpation, manipulation and spot filming without danger of exacerbation of bleeding. Since 1950 approximately 95 per cent of patients with massive bleeding have been examined in the first 72 hours of hospitalization. Examination is performed after bleeding stops, if the patient is not in shock, or in exceptional cases on those that are still bleeding. Approximately 3 to 5 ounces of barium sulphate in water solution is used and the entire examination is performed in the supine position without palpation or compression, only utilizing the forces of gravity, the air in the fundus of the stomach and peristalsis to outline the mucosal pattern of the esophagus, stomach (figs. 1 and 2) and duodenum. Serial spot films are made of the mucosal patterns (figs. 3, 4, 5) which may be studied later. After completion of the fluoroscopic examination in the supine position the patient is turned onto his abdomen and routine overhead films are made in the postero-anterior, right anterior oblique (fig. 6) and and right lateral projections. If the spot films of the esophagus prove to be inconclusive or suspicious of varices, serial films (fig. 7) are made of the lower two-thirds of the esophagus on the rapid cassette changer using a thick barium water solution. Exposures are not made with the esophagus filled with barium, but only after the large bolus has passed through the esophagus, thus leaving a well delineated mucosal pattern.

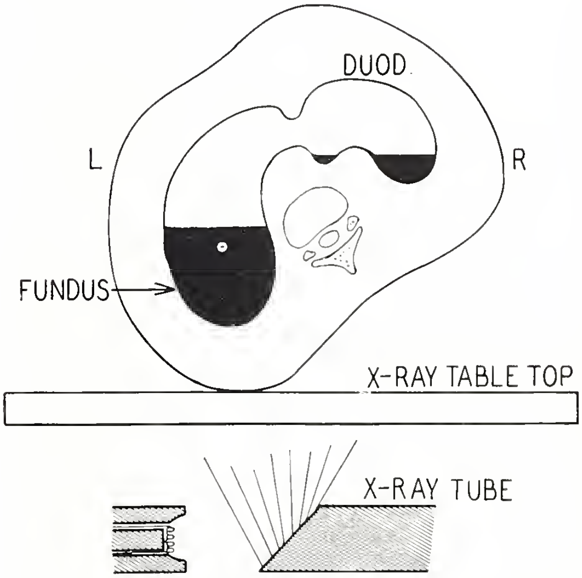

Fig. 1. Drawing illustrating the patient in the supine position, rotated to the left with air and barium outlining the distal end of the stomach and duodenal bulb.

In 1952 a consecutive group of 75 patients with massive bleeding were examined in a nine month

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Presented at the 10th Scientific Assembly, Missouri Academy of General Practice, October 17, 1958, St. Louis.

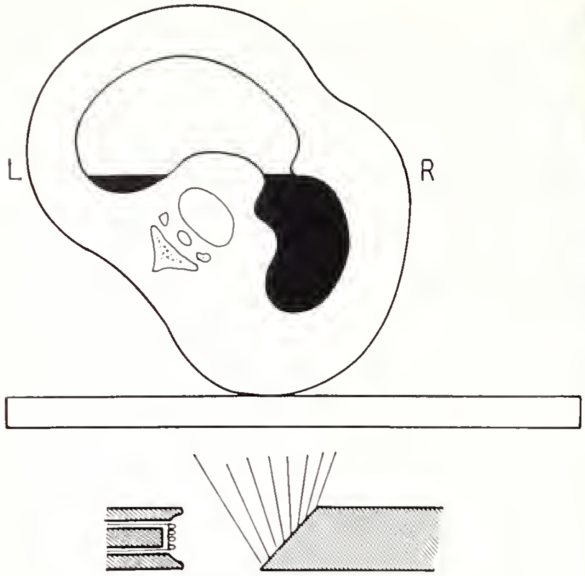

Fig. 2. Drawing illustrating patient in the supine position, rotated to the right and the barium filling the duodenum but producing an air contrast of the proximal half of the stomach. Figs. 1 and 2 demonstrate how the entire examination may be performed without palpation or manual compression, but by using only the forces of gravity, peristalsis and the gastric air bubble to outline the mucosa of the stomach and duodenum. Multiple spot films are made during the continued rotation of the patient.

period by William Jurgensen, M.D.,[1] resident in radiology at the St. Louis City Hospital No. 1. The accuracy of the diagnostic studies were verified by subsequent findings at autopsy, surgery, repeat gastrointestinal series and endoscopy. The bleeding lesion was verified by surgery or autopsy in 52 per cent of the patients and by unequivocal findings on a repeat gastrointestinal series in 30 per cent. Gastric or duodenal ulcers accounted for 67 per cent of the bleeding with duodenal ulcer being the source in 50 per cent. Esophageal varices accounted for 11 per cent of the lesions and hiatus hernia 8 per cent. In only 5 per cent of the patients the etiologic factor of the bleeding was undetermined.

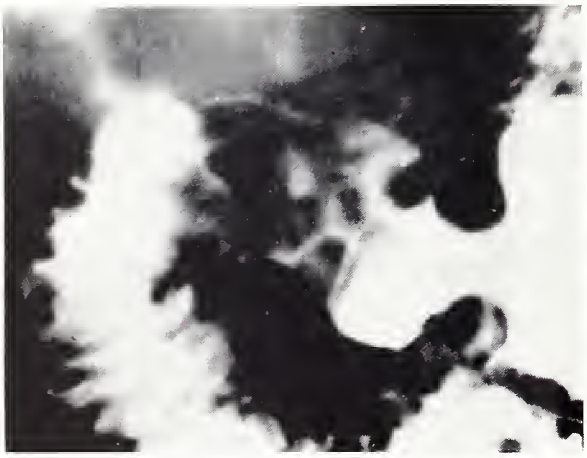

Fig. 3. Duodenal Ulcer. Air contrast of the duodenum demonstrating a central, barium retaining ulcer crater without deformity of the duodenal bulb.

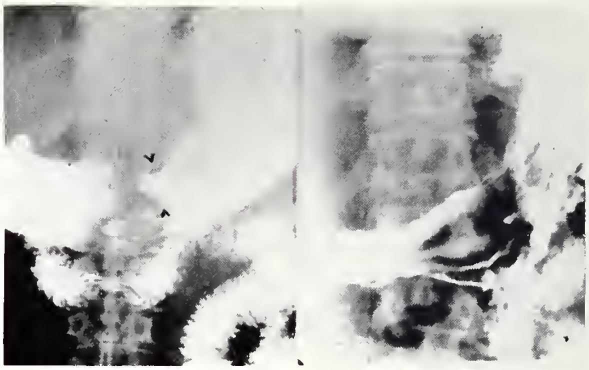

Fig. 4. Gastric Ulcer. Films made with the patient in the supine position. The stomach is draped over and compressed by the lumbar spine, producing a mucosal relief appearance and a large ulcer crater is seen. Film on the right was made three weeks later and indicates degree of ulcer healing with decrease in size.

The fluoroscopic and roentgenographic results were determined accurate only if the original impression was recorded by the radiologist was verified. In 81 per cent of the cases the fluoroscopist correctly identified a lesion, later found to be the cause of the hemorrhage. The major contributor to massive bleeding, duodenal ulcer, was correctly identified in 94 per cent. In two instances proved by surgery to be lower gastrointestinal bleeding the upper gastrointestinal examination was negative. In four cases which were undetermined after exhaustive study, the original fluoroscopy failed to find an upper gastrointestinal lesion. Only 3 per cent of the examinations were found to be unsatisfactory and in 11 per cent of the cases the original fluoroscopy failed to identify the lesion. The largest source of error was the superficial gastric ulcer which is easily overlooked in

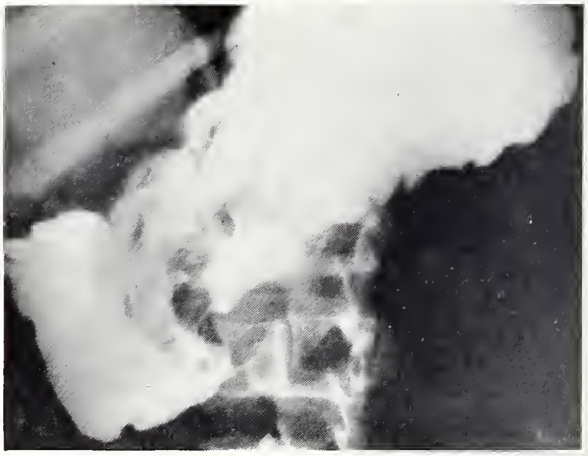

Fig. 5. Ulcerating Carcinoma of the Stomach. Patient is in the supine position rotated to the right and the stomach is draped over the lumbar spine with resultant compression and the demonstration of an ulcerating carcinoma on the posterior wall in the proximal third. Note the irregular translucent border of ulcer produced by the tumor.

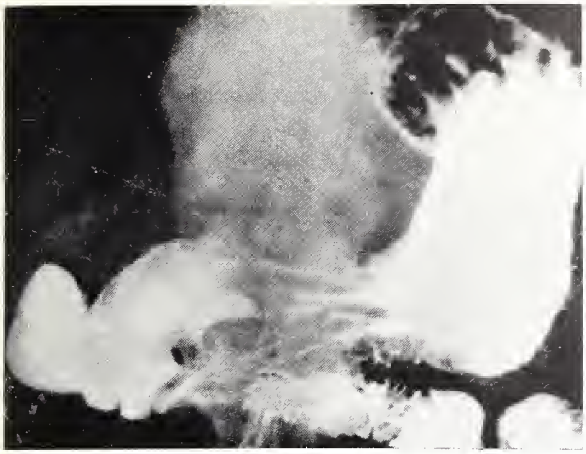

Fig. 6. Ulcerating Carcinoma of Stomach. Patient is in prone position and the lumbar spine is utilized to compress the barium filled stomach and demonstrate a large malignant ulcer in the pars media.

the unprepared patient. Blood clots in the stomach may simulate and be misinterpreted for polypoid new growths. Double lesions also promoted errors and were present in nine patients. The identification of esophageal varices does not indicate that this is the source of the bleeding for coexisting peptic ulcers[2, 3] were frequent.

The major question uppermost in the minds of most physicians would be, "What is the influence of the early examination on the bleeding?" In the actively studied series 29 per cent of the patients continued to bleed or rebleed despite active therapy. This seemed alarmingly high so a control group of cases treated prior to 1950[4] when the roentgen examinations were not performed until ten to fourteen days after bleeding subsided were reviewed. In this group it was also found that about 16 per cent rebled and 13 per cent continued to bleed after hospitalization. Small quantities of barium[5, 6, 7] have been shown to have less effect on the gastric motility and secretions than food and most therapists advocate early feeding. Also the reluctance to examine patients fluoroscopically is hard to understand when their abdomens are repeatedly palpated for tenderness and the presence of hepato and splenomegalia.

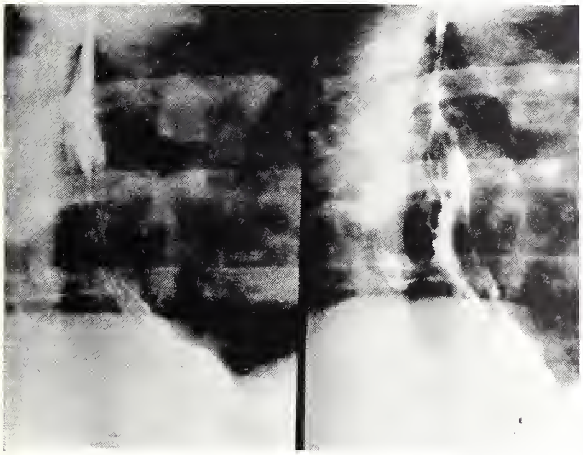

Fig. 7. Esophageal Varices. Multiple films must be made with good mucosal relief. Film on the left was made during peristaltic action which obliterates varices but film on the right was made a few seconds later and reveals extensive varices, evidenced by dilatation, thickened folds with bead-like indentations. Accurate evaluation of the esophagus for varices is dependent upon multiple good mucosal relief films.

Conclusions are that early radiologic examination in the massive upper gastrointestinal bleeding patient is highly accurate, not dangerous and may reveal the coexistence of such lesions as peptic ulcer and esophageal varices, or peptic ulcer and hiatus hernia. Establishing an early diagnosis has enabled more intelligent and definitive therapy of patients bleeding from the gastrointestinal tract.

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Missouri Academy of General Practice

(Continued from page 248)

General Practice and the American Psychiatric Association. The Kansas City Chapter is certainly to be congratulated upon these excellent postgraduate programs for the general practitioners in that area.

The program for the Fourth Annual Spring Clinical Conference at the University of Missouri Medical School, Wednesday and Thursday, May 13 and 14, is now complete. The two day course has been classified as acceptable for a maximum of 12 hours Category I Credit by the Commission on Education of the American Academy of General Practice. This Clinical Conference is jointly sponsored and promoted by the University of Missouri Medical School, the Missouri Heart Association and the Missouri Academy of General Practice. There is no registration fee and all physicians who are members of the Missouri State Medical Association will receive by mail a detailed program which will be an invitation to each physician to attend any or all of the two day course. Four outstanding guest speakers from

(Continued on page 275)

Ureteral Obstruction

Hyperpotassemia and the Electrocardiogram

MICHAEL BERNREITER, M.D., *Kansas City*

Potassium intoxication may be the result of excessive potassium intake, increased potassium formation as in crush injuries and hemolytic reaction after blood transfusion, deficient renal excretion as in uremia, lower nephron nephrosis and chemical poisoning. In clinical practice the most common cause is perhaps impaired potassium excretion, particularly after partial or complete ureteral obstruction.

While the clinical diagnosis of potassium intoxication is made with increasing frequency, the characteristic electrocardiographic findings are of great help and often give the first warning that potassium accumulation is in progress. The typical electrocardiographic changes have been described previously and need no repetition here. Suffice it to say that once these changes appear and are recognized, it becomes the responsibility of the clinician to establish the etiology of the hyperpotassemia and to institute the proper treatment if possible. Potassium intoxication, if untreated and progressive, will lead to death by cardiac arrest.

It is the purpose of this paper to again emphasize the importance of the electrocardiographic changes which frequently antedate the clinical picture and thereby give an early warning of the seriousness of the situation.

CASE REPORT

This 54 year old white female first entered St. Mary's Hospital on December 8, 1957, complaining of pain, discomfort and bloating in the lower abdomen. Vaginal examination revealed a large ulcerative cervical lesion and a "frozen pelvis." A biopsy was obtained and a diagnosis of squamous cell carcinoma was made by the pathologist. An electrocardiogram taken after admission (fig. 1) showed slightly prominent T waves in the midprecordium compatible with the diagnosis of early hyperpotassemia. Deep x-ray therapy was started on an outpatient basis. The patient was dismissed from the hospital December 13, 1957.

She was readmitted on December 26, 1957, with chief complaint of dyspnea, vomiting and extreme weakness. She had in the meantime received deep x-ray therapy as advised by the roentgenologist. An electrocardiogram taken on the day of admission showed severe hyperpotassemia (fig. 2). The serum potassium the following morning was 8.7 mEq., and the nonprotein nitrogen was 120 mgm. per cent. Ureteropyelogram done on December 28, 1957, showed "a high grade ureteral obstruction in the left side, compatible with obstruction produced by a large carcinoma of the cervix." The urologist further stated: "I was unable to pass a catheter up the left ureter more than 1.0 cm. On the right a catheter was passed for a distance of 25.0 cm. and 150 cc. of clear urine was withdrawn. The ureteral catheter was left indwelling and anchored in position with a number 16 Foley."

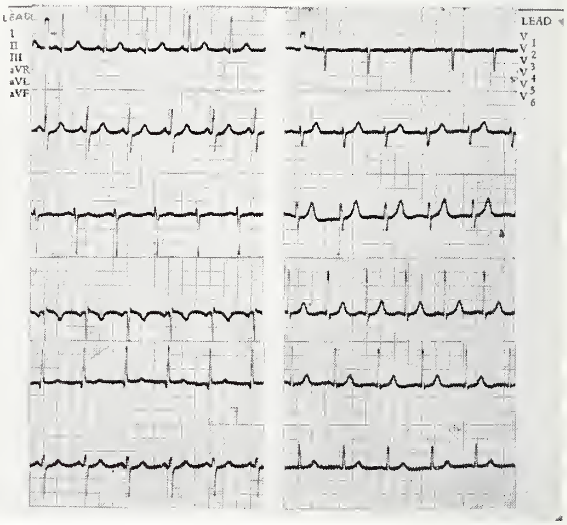

Fig. 1. This electrocardiogram was taken on Dec. 9, 1957, the day after first hospital admission. The rather prominent T waves in the midprecordium suggest but are not definitely diagnostic of early hyperpotassemia. (Note that the precordial leads of this and subsequent electrocardiograms are taken at 5 mm. standardization.)

On December 30, 1957, the patient was much improved and the urinary output was satisfactory (fig. 3). An electrocardiogram repeated a few days later (fig. 4) showed an essentially normal pattern. X-ray therapy was continued and finished February 13, 1958. Pelvic examination at that time showed that the pelvic tumor had apparently completely disappeared. The patient was dismissed from the hospital February 15, 1958. Since dismissal the patient has been seen several times by her physician as an outpatient. She has no complaints, has been gaining weight and at this time is doing her housework without difficulty.

COMMENT

Many factors may partake in the production of potassium intoxication but the most important of these are oliguria and anuria. The patient under discussion had an obstruction to the urinary flow either from her malignancy, or the edema following radium and x-ray therapy or both. Whatever the etiology of the obstruction was, the hyperpotassemia was increased by tissue destruction and

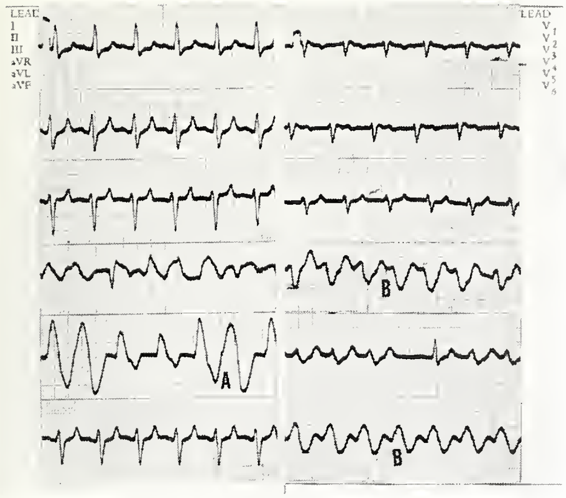

Fig. 2. Electrocardiogram taken on Dec. 26, 1957, the day of second admission shows many characteristics of severe hyperpotassemia. The T waves are prominent in Leads II and III, and P waves are flat and difficult to make out in most of the leads. A conduction delay is most apparent in the right bundle. Disintergration of the ventricular complexes (A, sine waves), ventricular tachycardia (B) and ventricular fibrillation (C) occurs in some of the leads. These are usually terminal findings in hyperpotassemia.

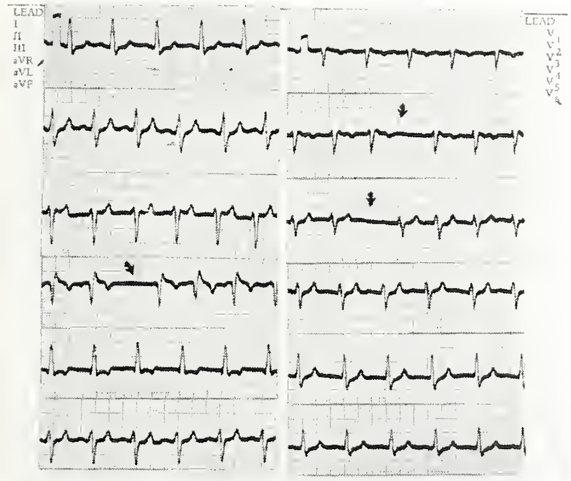

Fig. 3. Tracing taken Dec. 30, 1957, second day after ureteral catheterization. There is considerable improvement in the electrocardiogram although signs of hyperpotassemia still exist: flat P waves, occasional auricular stand-still (arrows), prominent T waves and incomplete right bundle branch block.

breakdown of red blood cells. This patient came dangerously close to "the point of no return." The value of the electrocardiogram showing "the agony of the heart" and giving the first important clue to the existing severe potassium intoxication was well demonstrated in this case. It led to urological investigation, establishment of free urinary flow and complete recovery. The crux of the matter in such situations is the speed with which the anuria is relieved.

SUMMARY

1. A case of severe potassium intoxication as a result of carcinoma of the cervix with bilateral ureteral obstruction is reported.

2. Characteristic changes in the electrocardiogram represented the first diagnostic clue to the etiology and the seriousness of the clinical picture: ureteral obstruction with oliguria.

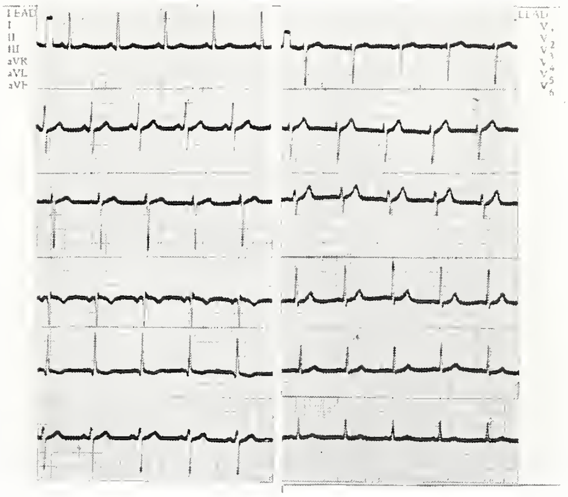

Fig. 4. Electrocardiogram was taken several days after that in figure 3. The findings are now within normal limits.

3. The electrocardiogram reflects the totality of the electrolytic environment as it affects the myocardium. It is therefore a more reliable index as to the clinical status of the patient than the information obtained by chemical blood studies.

4. Whatever the final outcome in this patient will be as far as her cervical carcinoma is concerned, her life has certainly been prolonged by correcting the severe hyperpotassemia.

432 Professional Bldg.

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Peripheral Arterial Occlusion

Surgical Emergency

EUGENE T. HANSBROUGH, M.D., *Poplar Bluff*

Acute peripheral arterial occlusion is a much discussed subject in surgical literature but the plan of therapy remains rather hazy. Most articles on this subject recommend surgery unless there be contraindications; others recommend immediate surgery in one location and conservative treatment in another.[1] I feel that peripheral arterial emboli are a surgical emergency and must be treated as such. Lumbar sympathetic blocks for lower extremity are to be condemned as these are as traumatic as a well performed embolectomy under local anesthesia; and although sympathetic block may bring about survival of an extremity, it will be certainly an arterial insufficient extremity. The old time limit of eight hours no longer applies, but surgery should be performed as soon as diagnosis is made. Distal thrombosis depends upon the time since occlusion primarily and delay lessens the chance of successful reestablishment of circulation.

The etiology of peripheral emboli has been fairly well established. The majority occur from the heart with mural thrombus beneath an infarcted myocardium or a fibrillating left antrum secondary to a deformed rheumatic mitral valve. A small percentage develop from arrhythmia secondary to infarction, and possibly a few occur from peripheral veins through a patient interatrial foramen (foramen ovalis). A considerable number of occlusions occur as thrombus formation at the site of markedly narrowed arteriosclerotic arteries due to dislodgment of a plaque. The onset is not as dramatic in these cases since collateral circulation has already been established.

Recent work by Towbin at Arkansas may change the present concept of contributing factors in peripheral emboli.[2] Dr. Towbin has isolated an anticoagulant present in circulating blood—and a anticoagulant present in circulating blood. It is possible that an imbalance of this anticoagulant in these critically ill patients who later from emboli is more important etiologically than is the older concept that lowered blood volume is the major predisposing factor.

The diagnosis of an acute arterial occlusion in a nonarteriosclerotic extremity is not difficult. The extreme pain requires large doses of narcotic and the blanched cold extremity beginning several inches below the level of the block with absent pulses is typical. Since the emboli always lodge at bifurcation, the site is not difficult to locate from physical examination. In arteriosclerotic vessels in which lodgment may be bizarre, an arteriogram may occasionally be necessary for accurate diagnosis[3] (fig. 1). Acute massive venous occlusion can be differentiated from acute arterial occlusions by the dusky color and rather prompt onset of marked swelling, although reflex arterial spasm makes the extremity quite cold to touch. The arterial occlusion in this case is, of course, reflex arterial spasm and a sympathetic block will usually give relief. Should the condition not be found until the femoral vein is exposed, a periarterial stripping of the femoral artery will give excellent relief from the spasm. Periarterial neurectomy was abandoned years ago because of the temporary nature of the procedure but it is unexcelled for arterial spasm. The treatment, as has already been stated, is immediate surgery.

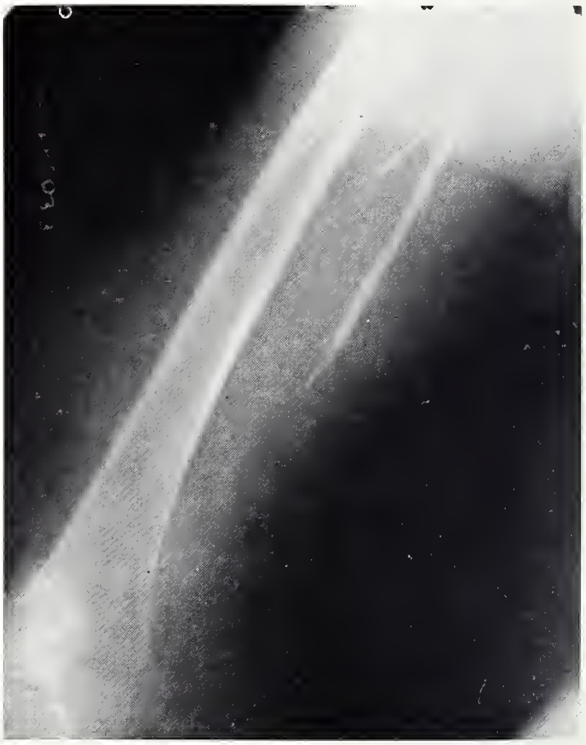

Fig. 1. Femoral arteriogram showing unusual location of an embolus in a markedly arteriosclerotic vessel. Removal was successful under local anesthesia.

Some patients are on anticoagulants and continued oozing is a problem; but meticulous hemostasis will allow surgery for occlusion in the extremities. On occasion it may seem wise to give the patient 100 mgm. of vitamin K_1 oxide if the patient is receiving Dicumerol, after which operation can be performed in four hours without bleeding problem. However, although vitamin K_1 oxide acts rapidly, its effect is lasting and adequate. Anticoagulant therapy with Dicumerol is therefore unsatisfactory for two or three days. If heparin has been used as an anticoagulant, protamine may be given and the patient, of course, be rapidly heparinized after operation.

In emboli the pulse just proximal to the obstruction is bounding and the location at bifurcation makes the site of incision rather easy to determine. In the femoral artery a longitudinal incision under local anesthesia, 1 per cent Procaine, is made over the femoral canal and the common femoral, deep, and superficial femorals are dissected free. If the patient is not taking anticoagulants, 5 mgm. heparin is then injected distal to the clot in both superficial and deep femoral arteries and vascular clamps placed on each. A small longitudinal incision is made in the wall of the vessel and the clot expressed. The distal clamps are removed and adequate back bleeding must be obtained before closure. Suction with a small catheter is on occasion effective as is manual expression (fig. 2).

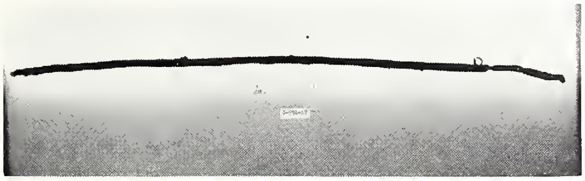

Fig. 2. Femoral artery distal thrombus removed by groin incision and gently pulling retrograde. This occlusion was due to an embolus from myocardial infarction and occurred with the patient on adequate anticoagulants. Onset of occlusion was 8 hours before surgery.

If there has been a marked delay in getting the patient to surgery the entire artery may be clotted. In that case a small incision is made behind the lateral malleolous and the posterior tibial artery is opened and cannulated.[4] Retrograde injection of normal saline under pressure may dislodge the thrombus through the incision made higher. However, this artery is so small, closure with an adequate lumen is difficult to obtain and, of course, the distal artery remains occluded.

When a good back flow is obtained the peripheral clamps are released to allow flushing of the vessel for a fraction of a second. A complete periarterial stripping is then carried out to prevent immediate postoperative spasm and the artery closed with a running 6-0 arterial silk.

Before release of the clamps heparin is given to a total dosage of 25 mgm. during the operation. Intravenous heparin is started two hours after operation in dosages to obtain bleeding time at about 30 minutes. I start oral Tromaxen at the same time using 1,200 mgm. and after 24 hours the patient is carried on this alone, keeping the prothrombin time 2½ times the control.

Anticoagulants are always given for 14 days as a minimum, and indefinitely in selected cases. Popliteal artery occlusions demand exploration as a high percentage of these patients will require amputation otherwise. All surgeons hesitate on occasion to explore this artery in a case which seems terminal, and I have done the same only later to amputate and see the patient up and about on prosthesis. A curved incision should be used behind the knee—otherwise the technic is the same as for a femoral artery. For locations between the branches in arteriosclerotic arteries a femoral arteriogram made on the operating table using the No. 18 Parhad Poppen needle may be of great help. The incision may then be made directly over the vessel at the level of occlusion. The thrombus and intima of the diseased portion of vessel will usually be removed. If vessel damage is extensive a by-pass graft may be preferable to opening the artery.

In aortic bifurcation occlusions a general anesthesia is necessary. Anticoagulants must be neutralized. This procedure carries a high mortality and is the only area in which I do not feel dogmatic concerning surgery. In the upper extremities the indication for removal are not as urgent, since the percentage of limb survival is high without surgery.[5] The same principles apply, however, and a weak hand is a handicap although nonsurgical treatment does not place the patient in a wheel chair. Longitudinal incisions are used over the vessels except in the axilla where a small transverse incision is entirely satisfactory even if the occlusion be at the subclavian-axillary junction. In the latter case the vessel is opened low and the clots milked down toward the incision. This point is important as the axillary incision can be made under local anesthesia but the more extensive incisions are poorly tolerated under local.

CONCLUSION

Acute peripheral arterial occlusions are surgical emergencies which require exploration. In all except the aorta the surgery can be performed in about 30 minutes under local anesthesia. The procedure is fell tolerated and the immediate relief obtained is dramatic. This type of surgery is much better tolerated than the continued severe pain of nonsurgical therapy.

621 Pine Blvd.

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Digitalis

HENRY HOLDERMAN, *Oakland, Calif.*

DIGITALIS, one of the earliest known herbals, was first studied by Fuchs, a German botanist. Although not interested in the pharmacology of the plant as a drug, he noted the toxic effects when taken internally.

It was not until 1775 that an English physician, William Withering, selected digitalis from a herbal recipe and established it as a therapeutic agent. In 1785, after ten years of study, he published the medical classic "An Account of Foxglove and Some of Its Medical Uses." Although he noted some effect on the heart, he ascribed the principal value of digitalis as a diuretic. John Ferriar in 1799 was the first to recognize the primary action of digitalis on the heart and diuresis as a secondary role.

SOURCE AND COMPOSITION OF DIGITALIS PRINCIPLES

All digitalis glycosides are natural, none having been produced synthetically, the few synthetic glycosides that are available have been derived from a naturally occurring precursor.

The official source of digitalis, as recommended by the *United States Pharmacopeia,* is Digitalis purpurea. Other species like Digitalis lanata are quite potent and are the source of commercial preparations now officially recognized. Formerly, the seeds were used but at present the leaves are employed almost exclusively in official preparations. The active principals in the leaves are glycosides and in each leaf there are several such glycosides which vary from species to species. In addition to the Digitalis family, other cardiac glycosides are derived from the seeds of Strophanthus plant, most commonly S. gratus.

The plant sources of the commonly used glycosides are tabulated below:

Digitalis Purpurea	*Digitalis Lanata*	*Strophanthus Gratus*
1. Digitoxin	1. Digitoxin	1. Ouabain
2. Gitoxin	2. Digoxin	
3. Gitalin	3. Gitoxin	
	4. Lantoside C	

The basic action of digitalis at the cellular level has been extensively investigated and two widely-held theories have evolved.[1, 2, 4, 5] In one, a mechanism of action based on the fact that contraction of the myocardium is related to relative concentrations of potassium in the cell and at the cell membrane. It is possible that digitalis in some manner affects the permeability of the myocardial cell to potassium ions, setting the stage for optimum contraction. A second hypothesis holds that the site of action of digitalis is limited to the energy utilization phase of aerobic oxidation of the myocardium. This is suggested by the evaluated glucose-oxygen extraction ratio in face of an unchanged consumption of the lactate-pyruvate substrate in low output failure.

VAGAL AND EXTRA-VAGAL EFFECTS

The view that digitalis decreases the heart rate only by vagal stimulation and depression of atrioventricular conduction is no longer tenable. Extensive clinical data attests to the fact that in patients with congestive failure normal sinus rhythm may show clinical improvement even before a decrease in the cardiac rate is manifest. Slowing of the heart rate may be the result of restored compensation instead of primary vagotonic effects.

The manner in which the vagus is stimulated by digitalis is not entirely clear. An earlier explanation was that cardiac glycosides stimulated the medullary nuclei. Other work indicated that the drug sensitizes the pacemaker of the heart to normal vagal impulses. In animal experiments, however, it has been demonstrated that digitalis does not slow the heart by any direct action on the vagal centers but by the effect on peripheral receptor, causing reflex vagal stimulation.[6, 7] The slowing produced by small doses of digitalis may largely be attributable to this mechanism since the cardiac rate may be increased by large doses of atropine. However, after full doses of digitalis neither atropine nor exercise is capable of producing an increase in the cardiac rate, and the persistent slow rate would appear to be due to extravagal myocardial action of digitalis. In the failing heart, ventricular slowing following digitalization is the result of the restoration of compensation by improving ventricular contractile power. With improvement of myocardial contraction, oxygenation is increased with subsequent reduction of the inability of the myocardium. A second effect is that of digitalis to increase the refractory period of AV conduction tissue, this latter being secondary unless failure is absent. One may summarize the basic actions of digitalis on the failing myocardium as follows:

1. It increases the force of systolic contraction of the myocardium without alteration in the diastolic fiber size, with a more complete ventricular emptying and increase in the volume of output per beat.

2. The duration of systole is abbreviated, allowing greater time for ventricular filling and heart rest.

From the University of Missouri Medical School, Columbia. Fourth year medical student.

3. The diastolic volume of the chambers of the heart is reduced with resultant decrease in the oxygen expenditure per unit of work of contraction.

CLINICAL USES

The *sine qua non* for a therapeutic effect with digitalis is congestive failure, although the presence of myocardial failure, of course, does not assure therapeutic success. In individuals with cardiomegaly, but in the absence of failure, cardiac output is not increased and in one third of a series studied was decreased.[9]

Digitalis offers little when myocardial disability is due to a mechanical constriction, e.g., tight mitral stenosis with pulmonary congestion and normal sinus rhythm. Likewise, it has little value in "pericardial embarrassment" of the ventricles as in constrictive pericarditis and in cardiac tamponade. It is usually not helpful in congenital heart disease. For example, it is effective only in a small per cent of cases in gross left ventricular failure due to a congenital defect.[3, 10]

The poor response of patients with pure right heart failure, i.e., cor pulmonale, to digitalis has been well documented. Conversely, patients whose congestive heart failure is primarily of the left ventricular type responds well to digitalis. It is possible that the difference in response between congestive failure in children due to rheumatic heart disease and that of congenital defect is partially based upon the type of failure. It is interesting to note the favorable effect of digitalis on the congestive heart failure of infants with uncomplicated coarctation of the aorta, a disease involving considerable failure of the left ventricle.

Digitalis exerts little effect in the majority of cases of "high out-put failure" as thyrotoxicosis, anemia, beri-beri, osteitis, deformans and arteriovenous fistulae, unless frank congestive failure is present.

It is in the group of so-called "low out-put failures," in which a loss of cardiac reserve is associated with a decreased cardiac out-put, that the cardial glycosides strengthen the contractible powers of the myocardium.[8, 11] This encompasses myocardial failure due to hypertensive cardiovascular disease, arteriosclerotic heart disease, luetic heart disease and most instances of rheumatic heart disease.

In addition to the primary effect upon the myocardium, digitalis in large doses impairs conduction in the atrioventricular junctional tissue and prolongs the conduction and recovery time of atrial tissue.[7] This property is of value when attempting to convert atrial fibrillation and flutter, minimizing the danger of ventricular tachycardia. Another important use is in the treatment of paroxysmal atrial tachycardia, when simpler measures of vagal stimulation have failed.

THE CHOICE OF A DIGITALIZING AGENT

No fundamental differences exist between the cardiac glycosides in their effect on the heart. Their differences are quantitative and are related to (1) completeness of absorption, (2) variability in potency and (3) duration of action (see table 1). It may be noted that powdered digitalis leaf, U.S.P., the most widely employed preparation, is adequately standardized so that in the usual situation the purified glycosides offer no clear-cut advantage in oral therapy.

Digitalization should, if at all possible, be carried out slowly with small doses administered until maximum benefit ensues or mild toxicity occurs. The advantage here lies in the fact that (1) toxicity, if it occurs, is usually minimal and can be controlled more readily; (2) patients may be digitalized on an out-patient basis without fear of severe toxicity developing and (3) a more accurate estimation as to the individual's tolerance to digitalis may be assessed.

TABLE 1

ACTION OF DIGITALIZING AGENTS

Agent	*Route of Administration*	*Onset of Action*	*Time for Maximum Effect*	*Duration of Effect*	*Maximum Duration of Toxicity*
Digitalis leaf	oral	6 hr.	12-48 hr.	17 days	1- 2 weeks
Gitalin	oral	3- 4 hr.	24-48 hr.	10-12 days	7-10 days
Digitoxin	I.V. oral	30 min. 2 hr.	2- 9 hr.	21 days	3 weeks
Digoxin	I.V. oral	30 min. 2 hr.	4- 6 hr.	4- 7 days	1- 2 days
Acetyl digitoxin	oral	2- 4 hr.	6- 8 hr.	21 days	1 week
Lantoside D (Cedilandid D)	I.V.	10-30 min.	2- 3 hr.	2- 3 days	1 day
Ouabain	I.V.	5 min.	30 min.	1- 4 days	2- 6 hr.

From Lown & Levine[3]

In case of emergency, lantoside D (Cedilandid D) or ouabain intravenously may be used. Ouabain is the more rapidly acting, but has the disadvantage that it is difficult to change to a more stable drug once the acute period is past.[18, 19, 20, 22] Approximately 36 to 72 hours are required for the complete elimination of ouabain, so that initiation of a longer-acting oral glycoside with ouabain at the onset of an acute episode may result in toxicity at a later time. At the time when peak digitalization is occurring with oral digitalis, enough ouabain may still be present to produce a cumulative and toxic effect. It is here that acetyl-strophanthidin (Lilly), a new, rapidly acting substitute glycoside, may be useful since it is totally eliminated in approximately four hours.[23]

In the last analysis it is not the digitalis compound employed, but rather the facility and familiarity that one has with any single drug that permits effective treatment of a failing heart.

DIGITALIS INTOXICATION

All therapeutically active digitalis preparations may cause toxicity.[12] The occurrence of toxicity bears little or no relationship to the compound used, but is conditioned by (1) the extent of failure, (2) the underlying etiology of failure, (3) the cardiac reserve, (4) electrolyte balance and (5) concurrent use of other drugs.

The therapeutic ratio (therapeutic dose to toxic dose) for all digitalis glycosides with the exception of one is approximately 67 per cent. Recently, an amorphus glycoside of D. purpura, gitalin has been claimed by some investigators to have a therapeutic ratio of about 40 per cent.[14, 15] Acetyl digitoxin (Acyalandid, Sandoz) the most recent synthetic derived from a naturally occurring glycoside has been shown to have a therapeutic ratio of 65 per cent.[16, 17] Increasing the full digitalizing dose, which is necessarily measured by means of clinical toxicity, one approaches the toxic dose of digitalis closely, often within 80 to 90 per cent. Seldom can one achieve full digitalization within the desired "therapeutic ratio range."

In acute congestive failure, the risk of over digitalization is considerable since there is a need for prompt and vigorous measures often without enough information concerning previous digitalis therapy. One must use caution when dealing with a patient known to have taken digitalis in the recent past. A number of digitalis preparations require as long as three weeks for complete elimination (see table 1). Obtaining a detailed history is most important. If the patient is unable to furnish sufficient information, the referring physician, the patient's pharmacist and members of the family should be contacted. A few minutes spent in crystallizing the patient's status before treatment may save hours of undue indecision later in the course of therapy.

Anorexia, nausea and vomiting are among the earliest and most common subjective symptoms of digitalis toxicity. Visual disturbances, characterized by flickering dots, color aberrations and dizziness occur in about 25 per cent of patients. These symptoms may not be mentioned by the patient and must be elicited. Headache is fairly common and may be the only presenting symptom. In elderly individuals central nervous system changes may predominate with bizarre personality changes.[3]

The earliest electrocardiographic evidence of digitalization consists of shortening of the Q-T interval, S-T segment scopping with a tendency for inversion of the first portion of the T wave. These changes do not necessarily indicate adequate dosage or toxicity. In fact, severe digitalis poisoning may be present without them. Every form of cardiac arrhythmia associated with conduction disturbance has been attributed to digitalis. In man, except for gastrointestinal symptoms, ventricular extrasystoles are the most common indicator of digitalis overdosage. With continuation of digitalis the ectopic beats assume the pattern of bigeminy or coupling with progression to a prodromal phase of ventricular fibrillation. This phase is characterized by increasing frequency of premature ventricular contractions, polymorphism of normal with abnormal beats, salvos of multifocal premature beats and paroxysmal auricular tachycardia. The common terminal event in fatal cases is probably ventricular fibrillation.

The single arrhythmia that occurs only with digitalis toxicity is paroxysmal atrial tachycardia with block, a hybrid arrhythmia partaking of characteristics of both atrial tachycardia and flutter.[3] In the latter, however, 2:1 block is the rule while only 30 per cent of cases of paroxysmal auricular tachycardia with block show such a response.

One of the chief difficulties encountered in digitalis intoxication is deciding whether the patient's difficulty is duc to cardiac failure itself or to digitalis overdosage, the first requiring additional digitalis, the latter requiring cessation of digitalis. This dilemma has engendered many bedside "tests," three of which bear noting although none is satisfactory.

1. Acetyl-Strophanthidin: Small amounts of this rapidly acting glycoside are injected intravenously at five minute intervals until signs of toxicity are reached by electrocardiogram monitoring or clinical improvement is noted. The amount of the drug needed is used as an index to the further digitalization of the patient.[3]

2. Calcium-Digitalis: Calcium chloride (10 per cent) is injected at 0.5 mg. increments intravenously at 2.5 minute intervals until signs of toxicity are reached. Then a chelating agent, di sodium edhylene diamide tetraacetate, is injected to tie up the excess of calcium ion. The amount of calcium chloride used is then directly calibrated to a table of per cent digitalization.[13]

3. Potassium: Slow intravenous injection of 40 mEq. of potassium chloride should be accom-

panied by electrocardiographic and clinical evidence of decreased signs of toxicity.[6]

"REDIGITALIZATION PHENOMENON"

It has been noted that patients laden with edema fluid and digitalized would exhibit manifestations of digitalis intoxication with mobilization of fluid with mercurial diuretics.[18] It was first thought that this was due to utilization of digitalis contained in the edema fluid, but doubt was cast on this explanation when it was shown that the administration of the same amount of digitalis mobilized with diuresis did not cause toxic manifestations. A second, and more plausible view, is that diuresis, by producing a potassium + loss, reduces the heart's threshold to the toxic properties of digitalis. It has been shown that (1) administration of potassium + salts during this period leads to reversal of toxicity, and (2) its administration prior to diuresis prevents intoxication.

TREATMENT OF DIGITALIS POISONING

1. Potassium Salts: There is a general agreement that toxic doses of digitalis drive potassium + from the heart muscle. It has, therefore, been thought that potassium + might be able to inhibit the actions of digitalis on the heart by depressing cardiac irritability.[12, 19] Extensive clinical trials have indeed proven this to be true.[20] In the presence of good renal function the administration of 2 to 10 grams of potassium chloride orally, are relatively nontoxic. The usual daily dose is 3 grams daily for a three day period. The effects usually appear in 30 minutes and persist for from three to eight hours.

2. Magnesium: Magnesium sulfate given in 20 ml. of 20 per cent solution is effective in abolishing many of the ventricular arrhythmias, but has the disadvantage of being quite transient and having an occasional tendency to produce a basic arrhythmia itself.[12]

3. Procaine Amide: This is effective in the treatment of both auricular and ventricular arrhythmias. It has a prolonged effect (24 hours) and is useful in long-term therapy. It is particularly useful when renal function is impaired and the use of K+ salts is contraindicated. The oral dosage is usually 1.0 gram initially; 0.75 gram after one hour with succeeding doses of 0.5 to 1.0 gram every two hours if there is no appreciable change. It may be necessary to continue oral maintenance therapy of from 0.5 to 1.0 gram every three to six hours. Intravenous administration should be reserved for extreme emergencies; then 0.1 to 0.2 grams per minute is given. However, a total dose of 1.0 gram must not be exceeded.

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Missouri Academy of General Practice

(Continued from page 267)

out of the state will appear on the program. They are: S. Gilbert Blount, M.D., cardiologist, University of Colorado Medical Center, Denver; Harold W. Brown, M.D., Professor of Parasitology, College of Physicians and Surgeons, Columbia University, New York; Lester R. Dragstedt, M.D., Professor of Surgery, University of Chicago School of Medicine, Chicago; and Randall G. Sprague, M.D., Professor of Medicine, Mayo Foundation, Rochester. Members of the faculty of the University of Missouri Medical School will also take part in the two day program.

Three new members were approved by the Board of Directors of the Missouri Academy at its meeting in Jefferson City on Sunday, February 1. They are: William Redmond, M.D., St. Joseph; M. R. Wilucki, M.D., St. Louis, active members; and George A. Richardson, M.D., Union, for associate membership.

Case Report

Endometriosis

Active Seven Years, Postmenopausal

EUGENE B. ROBICHAUX, M.D.; GEORGE E. SANDERS, M.D., AND
RALPH L. NICHOLSON, M.D., *Excelsior Springs*

ACTIVE ENDOMETRIOSIS is a disease in which the symptoms usually disappear with the menopause. Recently a case of active endometriosis in a postmenopausal woman was encountered in which acute abdominal symptoms occurred as a result of hemorrhage into the abdominal cavity. Because of the unusual occurrence of postmenopausal endometriosis the case history is presented.

A white woman, aged 50, first noted acute pain in the lower abdomen which was associated with urinary frequency, dysuria, abdominal distention and marked constipation. When first seen in the home she was acutely ill with nausea and vomiting. A catheterized specimen of urine was normal except for a faint trace of albumin. Symptomatic treatment was given without benefit. Three days later the sedimentation rate (Wintrobe) was 43 mm. in one hour, hemoglobin 14.4 gms., red blood cell count 4,460,000, white blood cell count 9,400. Differential white blood cell count contained 82 per cent polymorphonuclears. The VDRL and Mazzini were nonreactive.

Pelvic examination revealed a palpable mass in the right lower quadrant which was thought to be an enlarged ovary. The abdomen was distended and there was rebound tenderness. A diagnosis of a ruptured ovarian cyst and/or hemorrhage into the abdominal cavity was considered.

There was a normal menstrual history. The last menstrual period occurred seven years previously and there had been no menopausal symptoms. There had been one pregnancy 19 years before. There had not been a pelvic examination since childbirth. She had never been given hormonal therapy.

After admission to the hospital a pelvic examination, under anesthesia, revealed a tumor in the cul-de-sac of undetermined origin. A diagnosis of twisted ovarian cyst prompted surgery.

On opening the abdomen free blood was present in the abdominal cavity, and a multilocular cystic right ovary was identified located in the cul-de-sac. The uterus and opposite ovary were not unusual grossly. A bilateral salpingo-oophorectomy and total hysterectomy were done. The postoperative course was uneventful and there has been complete relief of symptoms.

Pathology:[1] The right ovary measured 8.5 by 6 by 5 cm. Numerous thin walled cysts were present over the external surface in some of which hemorrhage had occurred. The sectioned surface revealed areas of normal ovarian stroma and numerous thin walled cysts at the periphery, some of which contained hemorrhage. A larger cyst measuring 15 mm. in diameter was also present in which clotted blood was noted. Grossly, the left ovary was not unusual. There were no unusual findings in the uterus, cervix and fallopian tubes except for a small uterine fibroma. The microscopic sections revealed islands of endometriosis in both ovaries. The large cyst was lined with endometrial stroma at the periphery.

SUMMARY

The case history of a patient with endometriosis involving both ovaries, predominantly the right ovary, with intra-abdominal hemorrhage occurring seven years following the menopause has been presented. The patient had no previous symptoms relative to the ovarian endometriosis.

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[1] Victor B. Buhler, M.D., St. Joseph Hospital, Kansas City, Mo.: Pathological report and personal communication.

FATAL ACCIDENTS DECREASE

Approximately 91,000 accidental deaths occurred in the United States during 1958, according to the Metropolitan Life Insurance Co. This was a reduction of about 4,000 from the toll in 1957 and is the smallest figure for any year since 1954. The accident death date in 1958, estimated to be 53 per 100,000 population, established a new low record, decreasing from 56 per 100,000 in 1957.

The more favorable record reflects in part a reduction in motor vehicle fatalities. In 1958, for the second year in a row, the number of deaths from motor vehicle accidents decreased by about 1,000 to a total of approximately 37,000. However, motor vehicle accidents in 1958, as in prior years, accounted for more than two fifths of all deaths from accidents.

Accidents in and about the home killed approximately 27,000 persons. Public accidents other than those involving motor vehicles were responsible for 17,000 deaths.

Accidents in which five or more persons were killed caused nearly 1,600 deaths in 1958, about 100 less than in the preceding year. There were 10 major catastrophes, those which took the lives of at least 25 persons. While the number of such disasters was relatively high, their toll of 427 deaths was about the annual average for catastrophes of this magnitude.

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SEARLE

Special Article

Fifty Years of Medicine

MORRIS FISHBEIN, M.D., *Chicago*

I ENTERED MEDICAL school just fifty years ago, in September, 1908. I was born in Missouri. I usually begin speaking by saying that I was born in Missouri which made me skeptical, was raised in Indiana which made me literary and now live in Chicago which keeps me gun-shy. Soon after I entered medical school I met some of the great giants of medicine of our time, including among others Basil Harvey and R. R. Bensley, the anatomists, H. Gideon Wells, the pathologist, A. J. Carlson, commonly known as Ajax, the physiologist, C. Judson Herrick, the neurologist. That was an extraordinary faculty and I was fortunate early in having intimate contact with most of them.

Medicine at the time when I was born in St. Louis in 1889 was far different from medicine today. My mother had eight children and I was the second in the list. I learned much about obstetrics before I entered medicine. In those days the children were born at home. Today more than 90 per cent of the children born in the United States are born in hospitals, and the majority of them under the care of general practitioners.

The obstetrics of 1889 and the obstetrics of 1908 were far different from obstetrics today. When I first met Dr. Joseph B. DeLee in the Chicago Lying-In Hospital he was greatly concerned about a motto to put on the wall of the delivery room. He sought for a suitable motto and chanced finally upon a phrase by Hippocrates—"Primum non nocere," "In the first place do no harm." He thought it good for the purpose but he was doubtful of his Latin so he wrote to Prof. Keith Preston who was professor of classics in the University of Chicago, a dear friend of mine, a good bridge player. DeLee asked Keith about the translation. Keith was a great wit and he said that it was all right but that another translation was possible—"Do not be naughty in the first place." That really bothered Dr. DeLee. He decided to write to Professor Rand of Harvard who was also a distinguished classical scholar. He told Professor Rand about the motto and he told him what Preston thought. Professor Rand, who was also a wit, wrote back and said: "There is still a third translation possible—No harm in just once."

Go to the Chicago Lying-In Hospital today—I go often because my wife is a member of the board of directors. They have two delivery rooms; in one is the motto "Primum non nocere," in the other they have another Latin motto, "Non vi sed arte"—"Not by force but by skill." Keith Preston thought about that and he offered a better possibility—"Not biceps but forceps."

I am reminded of a story I heard about the famous Dr. Isaac Abt whom many of you knew. He was called to see one of our wealthy families in Chicago. After he had taken care of the little boy, the mother said to him "I wonder if you would mind going up to see our maid. She has been in bed two weeks and we don't know what is wrong with her but she doesn't want to get up. Maybe you would go up to see her." Dr. Abt climbed the three flights to the attic and there was the maid lying in bed. He said: "Mrs. Straus wants me to examine you." He examined her carefully. When he got through he said "I can't find a thing wrong with you. What's the trouble?" She said: "These people owe me three weeks back wages and I'm going to lie here until they pay up." Abt said to her, "Move over, they owe me $250.00."

During the last fifty years medicine has made more progress than in all the previous centuries of the life of man upon this earth. The progress that has been achieved in the last fifty years is infinitesimal in view of the great progress that is yet to come, much of which is already on the horizon.

A story they used to tell down in Indianapolis involved a boy who was frightened of ghosts. He had heard so many ghost stories! One night he was walking past the graveyard and a ghost came up; he began to run and he ran and ran and ran until he was out of breath. He sat down on a fence and in just a moment or two the ghost came up and sat down beside him. The ghost turned to him and said "Joe, we certainly did run." "Yes," said Joe, "but we ain't run nothing to what we are going to run." What we have accomplished is slight compared with some of the advances that are on the horizon.

The general practitioner of 1908, I remember well because I used to go home frequently in the summers and I had many doctor friends down in Indianapolis who allowed me to ride around with them and visit their patients. I was just a freshman in the medical school but they knew of my interest. I know I used to ride around with a surgeon named Dr. John Oliver, one named David L. Kahn.

Presented at the banquet of the Tenth Scientific Assembly of the Missouri Academy of General Practice, October 18, in St. Louis.

I look back upon that period and some of the doctors whom I saw in the surrounding country, in Anderson, in Muncie, in Shelbyville and Martinsville and some of those little towns. Those were the preantibiotic days, the presulphonamide days, the pretranquilizer days and the preantihistamine days; even the predigitalis of modern times. They prescribed iron and tonics. They had shotgun empirical prescriptions that contained many ingredients.

Some years ago I visited Indianapolis. At Eli Lilly's I went with one of the representatives into the stock room to see what the doctors were prescribing. They keep stocks of the things that the doctors are likely to prescribe. I came on one locker and there was a big 5 gallon jug with a lot of red medicine in it. I looked at the formula of this medicine and there were 28 different ingredients that went into this one medicine—about half elixir lactopeptine. I said "Who in the world prescribes that," and they said, "Well, we have an old doctor down here who is over 80 years of age and he still prescribes it."

THE OLD FAMILY DOCTOR

Consider the action of a doctor coming to see a patient in the home in those days. The doctor would come in and first he would ask a lot of questions. Then frequently if he had forgotten his stethoscope he would put his ear down on the patient and listen. If he could stay awake long enough, he would know what was going on. Frequently, however, the doctors were so tired, as they are now, that they hesitated to make these calls early in the morning and late at night. This has been common with the profession for many many years. Eventually, he would wake up and say "You have typhoid fever." That was what most of them had in those days.

The prescriptions in those days, which I studied at great length before doing any writing myself in the field of therapy, were based on the idea that everything the patient complained of should be treated with a medicine. The homeopaths who were still popular in those days had a different concept. They believed that for every disease there was a specific remedy. They gave very minute doses of anything that they gave and thereby did practice psychosomatic medicine. Modern remedies are potent. The old doctors would inquire symptom by symptom and prescribed for everything that the patient had. If the patient was acid, they gave him something to make him alkaline, and if he was alkaline they gave him something to make him acid. The idea was to balance. If he looked a little pale, he got iron, and if he seemed a little disturbed they gave him a little calcium and if he seemed a little weak, they gave him a little strychnine; you just put in everything that you thought he might need. Well, this would make quite a lot so they would dissolve it all in 60 per cent alcohol and they would say "Take 2 tablespoons every three hours." After the first three doses you didn't care any more what you had. The patent medicine peeople took a piece out of that book and we got Swamp Root and Lydia Pinkham's Vegetable Compound and 37 Indian herbs and Tanlac and many other mixtures of the past, most of which have disappeared, sometimes, I am happy to say, largely through my efforts.

Many of us fail to realize that before 1910 no great foundations were giving vast sums of money to medical research and there were no government appropriations for medical research. In the years previous to 1910 we were fortunate if a great discovery appeared once in ten years. Now we look for ten great discoveries every year; now it is exceedingly difficult to find the right person to receive the Cameron award, the Nobel prize, the Passano award and many of the other distinguished awards available in the field of medicine.

GREAT EPOCHS IN MEDICINE

Medicine advanced slowly from the time of Hippocrates and grew in epochs, each of which was related to the name of a great leader, a great investigator or a great discoverer, the reason being the same as with exploration. When a Livingstone penetrates into darkest Africa and opens the way it is not too difficult for other explorers to follow him. There was only one Christopher Columbus; after Christopher Columbus opened the way other explorers sought the New Hemisphere. And so it is in medicine also. Hippocrates wrote the rules for scientific medicine: Actual observation and writing down what you see, or hear, or know, regarding the course of disease. Then came Vesalius, the father of anatomy. After him, William Harvey discovered the circulation of the blood and, by that, was the founder of physiology, which was later advanced by many other great physiologists. Then came the period of Morgagni who was the first great pathologist, to be followed by Rudolph Virchow who gave pathology the science of the cell. Then we come to Edward Jenner, probably one of the greatest of the names of all times. A pupil of William and John Hunter, Edward Jenner first developed inoculation against smallpox and by that step founded the science of immunology.

Today when we hail the great discovery of Jonas Salk, when we see the beginning of the end of infantile paralysis through the creation of a vaccine made from a killed virus, we begin to see how far we had to go from the first trial made by Edward Jenner down to our modern times when we develop vaccines and serums against every form of infection.

What I consider the greatest of all medical discoveries, anesthesia, was the work of William Thomas Green Morton and Crawford Long who first freed mankind from the fear of pain and suffering. Both these great names will be forever in the history of medicine. Because of their work and that of Pasteur who proved the germ causation of disease, modern surgery became possible. Without anesthesia and without the work of Lister following Pasteur in establishing freedom from infection we would never have had the magnificent achievements of modern surgery.

And now another great name, a name that I think ranks among the highest, the name of Roentgen—Wilhelm Conrad Roentgen, who discovered the x-ray. We may well place the x-ray beside anesthesia as truly in the field of science. Here we are substituting accurate observation for guess work and that is what makes science.

Paul Ehrlich established chemotherapy with his discovery of salvarsan as a specific medication. Out of that discovery evolved ultimately sulphonamide and antibiotics and other chemotherapeutic substances.

In my list of ten of the greatest names in the history of medicine, I include next the name of Sigmund Freud who changed the psychology and psychiatry of his day, a pedestrian science, into a dynamic living vital science of the mind of man. Out of this has come our modern return to psychosomatic medicine. Many of you may have heard me lecture about a woman who was known as Mrs. Mary Morse Baker Glover Patterson Eddy, the founder of Christian Science. I have had great trouble in trying to explain that Mrs. Eddy was not thousands of years ahead of her time in her attempts to heal disease by the mind alone. Various forms of cultism have prevailed in the past in which there was an endeavor to heal disease by magic.

DISEASES TO BE CONQUERED

Here then are ten of the greatest names of all times in the history of medicine. Out of each one of these discoveries came many others. Now we begin to see where we are going into new fields of medicine. How little we know about some diseases that still remain to be conquered! In the very forefront of all the diseases that remain to be conquered is cancer. In the American College of Surgeons are the records of 50,000 or more people who have had cancer and who are living five years after the diagnosis was made. This does not mean that we understand cancer at present but we are so close that we are trembling on the brink of the answer to the problem of cancer. The whole answer is not going to come from x-ray or from surgery or from radium or even from chemotherapy. The answer to the problem of cancer is going to come with an understanding of the nature of the disease.

Then there is multiple sclerosis. There is so little that we really know about multiple sclerosis. I have just come from a meeting of experts in the study of viruses. Albert Sabin of Cincinnati believes that he has traced a definite connection between latent herpes, the herpes virus, and the appearance of multiple sclerosis. Other investigators also are convinced that multiple sclerosis is a virus disorder. When the biochemical conditions in the body of a person reach a certain stage, multiple sclerosis may attack. We are learning more of the way in which viruses actually perform in the human body. Think of the virus of poliomyelitis which is so highly specific, which tends to locate in just one type of cell where it does its great harm, in the anterior horn cell of the spinal cord. How specific is the choice of a virus in regard to the portion of the tissue of the human body that it will attack? The great significance is an understanding of the nature of viruses and their place in life. The cell can apparently be modified by biochemical changes so that a cell with one biochemical constitution is not attacked but a cell with a different biochemical constitution can be attacked by a virus. The virus will apparently seek out that cell exactly as the sperm, one among millions of sperms, will seek out the ovum. Then when that sperm has entered that ovum there is no longer another sperm that may gain entry. Think of the nature of the biochemical changes which take place and you begin to understand how far we have advanced in the last ten years in our knowledge of the viruses and bacteriophage and the nature of the cells of the human body.

Much of what has been learned has come within the last ten years through the work of John Enders of Harvard University. The whole picture includes also the work of Goodpasture with tissue culture and with cultures of the viruses so that investigators now work with living cells outside the human body. Our federal government this year voted some 300 million dollars for medical research. Think of that sum in comparison with what was being spent 50 years ago. To the billions of dollars voted by the federal government must be added 105 million dollars now being spent by the pharmaceutical houses. In 1908 practically no pharmaceutical house in the United States had a research department. Add 55 million dollars a year being spent by the foundations, the polio foundation, the cancer society, the heart society and similar groups and then realize why the United States leads all the world in medical research.

In the *British Medical Journal* and in the London *Lancet* published recently are editorials comparing the plight of research in Great Britain with the tremendous sums now being made available in the United States. Our government recently appropriated more than 5 million dollars to be used by the pharmaceutical companies which established tissue culture departments to manufacture poliomyelitis vaccine. These companies are screening against cancer cells something over 20 thousand different chemical substances which may possibly be specific against the growth of the cancer cell. No doubt some of those who lectured here on obstetrics pointed out that there is one form of cancer, choriocarcinoma or chorio epithelioma, which is yielding to chemotherapy. (I prefer the word "cancer." If we stop saying "carcinoma" and "epithelioma" and just say "cancer" we have a little better understanding by the public of what we are trying to learn. Among doctors and pathologists we can talk about adenoma, sarcoma or epithelioma.) The National Cancer Institute has reported 27 cases of choriocancer treated with methotrexate. Five completely cured walked out of the hospital well and have remained well since. Most others were greatly benefited; a few were so far advanced that they died.

This is happening day by day, piece by piece, in relation to different forms of cancer. Tissue culture and virus study have given a better knowledge of many types of disease. Some years ago an epidemic occurred in the United States of a virus disease caused by the APC virus, adenopharyngeal conjunctival infection. It caused a two day illness among children who were in summer camps. One pharmaceutical house developed a vaccine against this type of virus, the APC vaccine, and some experiments have been done injecting this live virus which caused the mild disease directly into cancer of the uterus. Apparently some such cancers have been controlled by the action of this virus against whatever it was that caused the cancer.

Many of you may remember the time when Wagner-Jauregg of Vienna got the Nobel prize for his work in the curing of general paralysis by giving malaria. After the patient got the malaria, the progress of the paralysis was halted. The malaria could be controlled with derivatives of cinchona or quinine.

ENDOCRINOLOGY

In 1908 when I entered medical school I think the only thing we really talked about seriously in regard to the endocrine glands was about the thyroid and the adrenals. A. J. Carlson taught us that the adrenal gland had two parts, the cortex and the medulla; from the medulla we got adrenalin and no one knew what there was from the cortex. Many of you may remember also that the famous Claude Bernard had an idea that there was something in the sex glands, in the testes and the ovaries that had a profound influence on the body. He attempted to rejuvenate himself by injecting extracts of the testes. He actually injected himself with one of the extracts which he made. He thought he was doing a controlled experiment. He ran up a flight of steps and timed himself in getting up the flight of steps, then he gave himself an injection of the extract and he ran up a second time and found he could run up faster the second time. That was not really a controlled experiment but an example of the will to believe. Similar were the studies of John R. Brinkley who lived in Missouri and Kansas. Many others have believed the secret of life and rejuvenation is the glands. The knowledge of 1908 compared with the knowledge of 1958 is so infinitesimal that we can appreciate what it is going to be like in 2058.

I will indulge here in some fanciful thinking. The pituitary gland is the master gland and it controls the thyroid, the mammary gland, the adrenal glands, the testes and the ovaries through the trophic hormones. The somatotrophic hormone regulates growth of the human body, so we may ultimately make giants or dwarfs at will or create bodies of almost any size. Also in the pituitary gland is a substance called the melanocyte stimulating hormone known as MSH, which exercises control over pigmentation of the human body. Similarly reports say there is a substance called melanotonin in the pineal gland. I began thinking in a fanciful way about what the melanocyte stimulating hormone might do when it is finally brought under control. For the first time in history, during the last four or five years we believe we have something that can control vitiligo. A remedy from Egypt called ammi majus is given and then the skin exposed to sunlight or to ultraviolet and the white patches of the skin darken so that they resemble the rest of the skin. Albinos have the white hair and the pink eyes and the pale faces showing that they lack pigment. They probably have a deficiency of the melanocyte stimulating hormone; conceivably when an adequate amount of this potent hormone becomes available albinism can be wholly prevented.

Now carry this to its farthest possible reach. Consider what the people in animal industries do in modifying the color of the feathers, the color of the hair and the color of the skin of different breeds of animals. In man's far distant future he may be able to control the color of the eyes in the human being, the color of the human being, the shape of the human being, perhaps even the brain power of the human being. I am not pretending to prophesy as Huxley did in his "Brave New World" but I merely project as far as possible the beginnings of the knowledge that we now have. Can mankind in his present state of knowledge, in his present state of emotional upheaval, cope with discoveries of this kind? What will we do with discoveries that are more potent for good or for evil than the atom bomb? We have meetings all over the world, at the summit and under the summit, but nobody has yet solved the control of nuclear energy.

Other hormones are closely related to the problem of cancer. Charles Huggins, who has just received the highest award that the German government can give to a scientist and who is about to receive the Cameron award, was the first to determine definitely that the giving of the estrogenic hormone could delay cancer of the prostate and that the giving of testosterone could delay metastases from cancer of the breast. This is just the beginning of finding out what constitutional forces have to do in relationship to the growth and the election of the place of appearance of cancer.

I have been greatly interested in recent years in the question of the relationship of cigarette smoking to cancer of the lung. I am not at all convinced that cigarette smoking alone is a specific cause of cancer of the lung. We have 60 million people who smoke and we have 25 thousand cases of cancer of the lung a year. Some five thousand cases occur in people who have never smoked once. Other forces must be at work in the patient besides just the excessive smoking of tobacco. I think that the glandular constitution of the person concerned is most significant in whether or not he is going to get cancer and the place where he gets cancer. Where cancer appears may be determined by the extraneous forces which irritate certain cells of the body into increased growth and activity. If this person did not get cancer of the lung, he might get cancer of the stomach. If he did not get cancer of the stomach he might get cancer of the testes or cancer of the prostate or cancer in some other portion of the body. It resembles the Adlerian psychology which indicated that for every person there was in the body a locus minorus resistentiae, an area of lessened resistance, the area likely to succumb when the detrimental forces went to work.

Modern surgery makes me think of that line in "Oklahoma" about Kansas City: "They have gone about as far as they can go." Suddenly the surgeons do something else that is so unbelievable. Who would have believed in 1908 that it would be possible for surgeons to expose the human heart, to bypass the blood around the heart, to operate on a dry heart, to open up constricted valves, to build new valves, to close up openings in the walls of the heart? How long will it be before there will be operations for coronary thrombosis, taking out the thrombus as they already take out thrombi and emboli in other portions of the body. When we realize what is accomplished by such operations as those done on the blue babies, arterial shunts, operations for aneurysm of the aorta, and new types of operations that are done on the brain, we simply have to believe that there is no limit whatever to what surgery will ultimately accomplish. Surgery advanced with anesthesia, with new technic, with antibiotic drugs, with blood transfusion and the availability of blood. This might be a fine place for me to launch myself into the battle between the American College of Surgeons and the general practitioners as to who should operate and who should not operate. As surgery is made more and more safe, as the controls over surgery are more and more consistent throughout the nation, as there are more and more good hospitals open to well trained doctors all over the United States, the time is just about here when the doctor must let his conscience be his guide. He must know his limitations. No one at a distance can tell in an emergency just what a doctor ought to do, particularly when even the doctor himself may sometimes not be too sure.

MEDICAL ECONOMICS

The patient of today is so well informed that he does not hesitate to go to the hospital. The latest figures indicate that today in a population of 176 million people in the United States, there are only 2½ million people not in touch with a good hospital. Nowhere else in the world are the mass of doctors uniformly so well trained, so competently taught as to the possibilities of modern medicine!

The problem of satisfying the medical needs of the people is not only an economic one but also a problem of just who shall be responsible for the controls that are placed over the general practitioners in any single field. I have always said that the real answer to the problem of the cost of medical care is more and more well trained general practitioners. The well trained practitioner is best equipped and best located to treat the mass of the people at a minimum cost. I have visited Great Britain every year once or twice since 1947. In Great Britain they are finding that their system has done harm because the general practitioner does not see the patient when the patient goes to the hospital. The patient then is turned over to a specialist. At this moment the College of General Practice in England is undertaking a great campaign to get this whole system of the National Health Act changed so that the general practitioner will be something more than just a man who points out where the patient ought to go to get the treatment that he needs.

GENETICS

The biologists and the biochemists are making extraordinary contributions related to nucleic acid and the amino acids of the cell. New emphasis is placed on Virchow's concept of the supreme importance of the individual cells of the body. The geneticists trace the nature of man to the genes which lie within the individual cell.

Already the geneticists and the experts in heredity have progressed sufficiently so that they can recognize the modifications chemically, physically or otherwise in the genes which may be responsible for a great deal of deformity and disability and disease. Memory, as music memory and talent and mathematical memory, are in the genes and are inherited. They may not be inherited directly from you and your wife. In every family, far enough back, there is a horse thief and also a talented person. Tay-Sachs disease, for example, produces idiocy and paralysis with degenerative changes in nerve cells causing early death. First it was determined that the abnormal metabolism principally affects Jewish people and now a piece of research has been completed which shows that it is not all Jewish people but what are known as the Askenazi Jews, who differ from Sephardic Jews. Hemophilia is highly specific in its inheritance. Many other disease conditions are inherited because of the nature of the germ cell. Once enough is known about the germ cell, the ovum and the sperm, and how their modification can be responsible for all sorts of constitutional conditions, the ultimate question of the nature of life itself will be answered.

Potent forces and powers are already in process of development far too dangerous for careless decisions. These are problems which our great philosophers and our great statesmen should be considering as well as whether or not we should support Chiang Kai-Shek. I am more worried about the genes than about Chiang Kai-Shek.

These are some of the problems that concern medicine today. These concern not only the specialists but every physician. They concern the physician before everyone else because upon the physician rests the final determination of many of these questions. Upon the physician rests the use of these new forces and this new knowledge and understanding and upon the physician, particularly the general practitioner, lies the application of the newer knowledge in producing better people and happier people.

I have left for the last another field in which I have been concerned of late, namely, the brain research foundation. Few of us stop to think that we have had foundations for all sorts of individual diseases and for all sorts of various functions of the human body but that we know relatively little of the human brain. I was recently in Italy where I visited the Institute de Sanita, which is the scientific research institute maintained by the Italian government. I saw there a machine built by Ernest Chain who received the Nobel prize along with Florey and Fleming for the discovery of penicillin. About three years ago Chain stopped studying antibiotic drugs, frankly, as he told me, because the drug houses can do that research so much better that it is no longer necessary for the research institutes to screen antibiotic drugs. In the Institute de Sanita the famous Dr. Chain and his wife, who is also a biochemist and worked with him in Oxford University before he went to Italy, work together. They have developed a new type of machine. Automation, which is a big word now in industry in the United States, is coming rapidly into medicine. This machine includes a continuous perfusion apparatus. A piece of living tissue taken from a body, from a mouse, a rabbit, a monkey or a human, a piece of brain, liver or kidney or whatever you like, is put in the continuous perfusion with isotonic salt and with a nutrient medium to keep it alive. In this fluid is carbon 14 radio active, which can be traced as it attaches itself to certain parts of the chemical constitution of this piece of living tissue. As the fluid comes from the tissue it goes into an area where there is paper chromatography. As the fluid goes into the paper, the paper sucks up the fluid and then by putting certain chemical substances along this strip of paper you can get reactions when the substance reaches the chemical substance with which the paper is saturated. The radio activity is measured with a scintillation counter. Finally, hitched up with this is an intensive amplifying apparatus so that an electric typewriter is forced into action and typewrites on a big sheet of paper a number of numbers of different kinds and by the areas and intensities of these numbers you can determine the percentage of glucose, nitrogen, carbon, of all of the different substances that have been developed in this piece of living tissue.

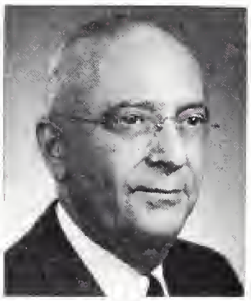
I was recently in the laboratories of the University of Chicago where blood cells are no longer counted by a girl with a microscope. Blood cells are now counted automatically by casting light through a solution of the blood and then by the automatic count this tells immediately just how many red cells there are per cubic millimeter. In cytology there is now also a great effort to diagnose cancer cells by simply transmitting light through a slide of the suspected tissue and in that way determine whether or not cancer cells are present.

I have seen a patient who lies on a bed and who is connected up with a machine which records simultaneously many different processes going on in the body over a period of hours. You can see the changes in the patient's metabolism, in the various fluids of the body, all recorded automatically.

What is a general practitioner going to do about these machines? How are we going to coordinate medical practice in such a way that the general practitioner as the main person, the first to see the patient, will recognize the need for the application of these highly scientific and intricate devices and see to it that the patient goes eventually, perhaps first to a district hospital, and then on and on so that each patient has the opportunity of getting the most that medicine can give. This is going to require the best brains that medicine can provide. I have the feeling that having met some of the problems that we have already met, we will also be able to meet this one.

President's Page

The Vendor program, Public Law 880, first passed by the Congress in 1956 and later amended, and which has taken much time of the Council and the House of Delegates, is now in the Missouri Legislature as H.B. 1 and S.B. 13. It was passed quickly by the House under a rule that allowed no amendments, was sent to the Senate and referred to the Senate Committee on Public Health.



W. F. Francka, M.D.

The resolution finally adopted by the Association's House of Delegates at the last annual session included "Resolved, That physicians not be paid for their services under the vendor act, and be it further, Resolved, That any vendor legislation should make provision for the appointment of a medical advisory committee to consult with and advise the Missouri Division of Welfare on all matters affecting any phase of medical care connected with the program."

The present bills do exclude physicians from receiving compensation under the program and also provides that there may be an advisory committee.

Efforts will be made to have the legislation amended so that the advisory committee is mandatory. If such is accomplished, the legislation will meet the conditions approved by the MSMA House of Delegates last spring.

Any important actions in the Legislature will of necessity be reported to the membership directly since publication dates make up-to-date information impossible.

W F Francka

EDITORIALS

Annuities of the Self-Employed

Identical to the Jenkins-Keogh bill, H.R. 10, which passed the House in the second session of the 85th Congress, H.R. 9 and H.R. 10 have been introduced in the present Congress by Simpson (R), Pennsylvania and Keogh (D), New York. Similar pending bills are H.R. 18 and 97. The purpose of the bills is stated as "To encourage the establishment of voluntary pension plans by self-employed individuals. The bills were referred to the Committee on Ways and Means.

The bill would permit a self-employed individual to deduct from adjusted gross income an amount equal to 10 per cent of net earnings from self-employment or $2,500 annually, whichever is the lesser. No deductions would be allowed for any taxable year after the individual attains age 70. The maximum in an individual's lifetime would be 20 times the maximum annual deduction allowable, but in no case could it be more than $50,000.

For individuals aged 50 or more on January 1, 1959, the annual limit would be increased by one tenth for each full year in excess of 50, as determined on January 1, 1959. Thus, for an individual aged 60 on that date, the annual limit on his deduction would be 20 per cent of self-employment income up to a maximum of $5,000.

A special limitation is imposed on individuals who have previously received benefits under an employer's pension, profit-sharing or stock bonus plan. Included in such plans would be a pension or retirement plan (including military) established by the United States or any political subdivision. Such an individual would have his lifetime limit (20 times his allowable annual deduction) reduced by the number of years he was covered by such retirement plan. Thus, an individual covered under a civil service retirement program for 15 years would be allowed a maximum lifetime deduction of five times his annual allowable deduction. No individual would be allowed a deduction in any year in which he received any benefit under any of these pension plans.

A self-employed individual is defined as one who is subject to the tax on self-employment income under the Social Security Law and doctors and clergymen. The fact that a self-employed person receives some wages, subject to social security taxes, would not necessarily exclude him from eligibility for the deduction.

Payments may be made to purchase a restricted retirement policy from a domestic insurance company or to build up a restricted retirement fund, which is nonassignable, at a bank which must be the trustee. No life insurance benefits could be provided under a restricted retirement policy after 70½ years of age. Payments under such a policy must begin by age 70½. Annuities may be only life annuities on the insured, or joint and survivor annuities on the insured and his wife.

Payments from a restricted retirement fund also must begin by age 70½ and be completed by age 80. Certain restrictions are placed on investments on restricted retirement funds.

Benefits received after age 65 are to be considered as part of gross income and subject to the regular tax unless a lump sum payment is received. In such a case, the tax would be computed by finding the increase in tax resulting from including 1/5 of the total payment in gross income and multiplying the tax increase by five. If an individual, before reaching age 65, "takes down" more than $2,500, the tax would be 110 per cent of the aggregate increase in tax, had the amount been received equally in the taxable year and the four preceding years. If the amount is less than $2,500, the tax would be 110 per cent of the tax attributable to the "take-down."

In case of death, the amount of death benefits equal to the cash surrender value of the restricted retirement policy at the time of death would be treated as income to the beneficiaries. The life insurance benefits would not be considered part of their gross income. Amounts paid to decedent's beneficiaries under the restricted retirement trust fund would be considered taxable as gross income.

The House Ways and Means Committee approved passage of these acts on February 9, 1959. The legislation is expected to pass the House of Representatives soon.

Have you written to your Congressman?

American Philanthropy Increased

Contributions to American philanthropy increased 5.97 per cent in 1958 and assets of gift supported institutions increased more than $2 billion, it is reported by the American Association of Fund Raising Counsel.

The rise in contributions exceeded, for the first time in recent years, the gain in personal income, to bring total American philanthropy to a new high of approximately $7.1 billion.

The report notes that total assets in investment and property of philanthropic institutions have increased by some $12 billion in the last decade and are not estimated to exceed $45 billion. World assets of such institutions are estimated at $240 billion.

Higher education is estimated by the association to have property and endowment in excess of $14 billion. Physical facilities alone were increased by $560 million in 1958.

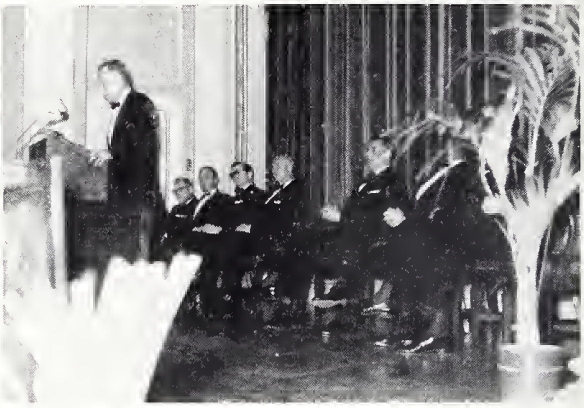
Assets of foundations created for philanthropic giving are estimated at between $7 and $8 billion.

Musings of the Field Secretary

On Wednesday night, January 7, the Buchanan County Medical Society sponsored a special program on medical public relations. Four well-known, nonmedical, St. Joseph people appeared on a panel to discuss questions posed by the doctors on medical practices and general procedures not too well understood by nonmedical persons. Former State Senator, Francis Smith, served as moderator for the panel discussion. Members of the panel were: Mr. Theo Quinn, postmaster; Mr. Jefferson Alison, Jr., salesmanager for the Goetz Brewing Company; Mr. John H. Waggoner, collection manager; and Mrs. John Wyeth of the St. Joseph Board of Education. In contacts with the panelists prior to the meeting it was made clear that the doctors were not seeking praise, but to find suggestions on how to improve their public relations. Some of the points discussed throughout the evening were: sliding fee schedules; differences between the various branches of the healing arts; calling in of consulting physicians; doctors and house calls; group practice vs. solo; practice by appointment; deductible health insurance policies, and abuse of hospitalization insurance.

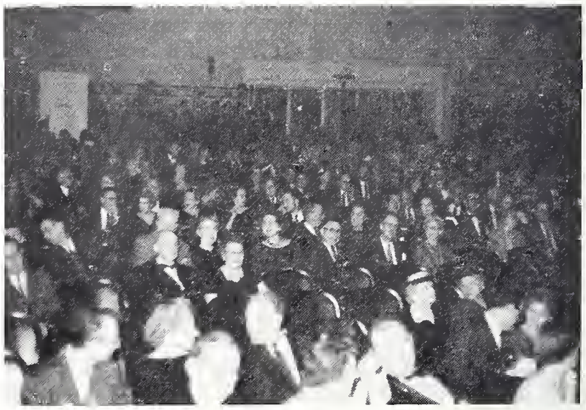
Incoming and outgoing presidents were in receiving line at the St. Louis Medical Society installation.

Approximately 300 people including doctors, their wives and guests, attended the St. Louis Medical Society annual installation of officers on Tuesday night, January 6. For the first time in many years a general practitioner received the high honor of being installed as president of the largest component society of the Missouri State Medical Association. Dr. Robert B. Bassett was presented the gavel by retiring president, A. W. Neilson, M.D. Dr. Bassett's first official presidential act was to present the past-president's key to Dr. Neilson. The inaugural address was given under the title "Current Trends in Third Party Medicine." Dr. Bassett stated that a third party can most easily be defined as any interested group, or individual, which for any reason comes between the doctor and his patient and alters that relationship in some manner. Going further he said that each third party must be examined carefully on its own merits and from different points of view in order to determine whether it is likely to benefit or harm this relationship.



Dr. Bassett, incoming president of St. Louis Medical Society, delivered his presidential address.

Other officers installed on this gala occasion were: Paul F. Max, M.D., president-elect; Don C. Weir, M.D., vice-president and councilor; Charles S. Sherwin, M.D., secretary; John P. Eberle, M.D., Edward M. Cannon, M.D., John L. Horner, M.D., Michael M. Karl, M.D., and Willard Bartlett, M.D., councilors.



A large group attended the installation ceremonies.

Following the inauguration ceremonies a delightful social period in the banquet room took over. Music, refreshments and conversation seemed to be well enjoyed as viewed by this observer.

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References: 1. Hart, D.; Bagnall, A. W.; Bunim, J. J., and Polley, F. H.: Ninth International Congress on Rheumatic Diseases, Toronto, Ont. (June 25) 1957. 2. Report of Joint Committee, Medical Research Council & Nuffield Foundation, Treatment of Rheumatoid Arthritis, British Medical Journal (April 13) 1957. 3. Friend, D. G.: New England J. Med. *257*:278 (Aug.) 1957.

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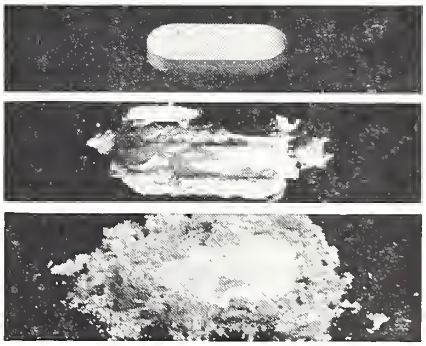

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News—Personal and Professional

The St. Louis Council of Boy Scouts presented a statuette December 17 to **Arthur W. Neilson**, M.D., then president of the St. Louis Medical Society, in recognition of work in Scout summer camps last year by about 30 physicians.

On December 30, the McCune-Brooks Hospital received a $10,000 gift on behalf of **Jules B. Van Urk**, M.D., Carthage, from two of his friends and patients, Commander and Mrs. Harold E. M. Thompson of Carthage.

Three professors from St. Louis of the Washington University faculty spoke at the annual meeting of the American Academy of Allergy in Chicago, February 9 through 11. They were: **Stanley F. Hampton**, M.D., St. Louis, professor of clinical medicine; **Joseph W. Noah**, M.D., St. Louis, assistant professor of internal medicine; **Ben H. Senturia**, M.D., St. Louis, associate professor of otolaryngology.

Robert I. Pfeffer, M.D., St. Joseph, has been elected to the board of directors of the Missouri Association for Mental Health for a term expiring in October 1961.

"Recent Advances in the Diagnosis and Treatment of Heart Disease" was the subject of a talk given by **Earl L. Loyd**, M.D., Jefferson City, at a dinner meeting of the Pettis County Heart Council in Sedalia, January 26. Dr. Loyd is past president of the Missouri Heart Association.

Leo Wade, M.D., New York, formerly of St. Louis, has been appointed Chairman of the Organizing Committee of the 13th International Congress on Occupational Health which will be held in New York at the Waldorf Astoria Hotel, July 25-29, 1960.

The 14th Annual Tri-State Clinical Conference of the Indiana, Illinois, and Missouri Trudeau Societies will be held in St. Louis on March 6, 7, and 8, 1959, at the Coronado Hotel.

Supervisor James H. McNary announced on January 6 the appointment of **John C. Murphy**, M.D., St. Louis, as acting health commissioner of St. Louis County.

"How Is Your Mental Health?" was the subject of a talk given by **Sigmund Gundle**, M.D., Kansas City, at the January meeting of the St. Joseph Mental Health Association.

E. B. Hanan, M.D., Springfield, was the guest speaker at the dinner meeting of the West Central Missouri Medical Secretaries and Assistants Society, on January 9. Dr. Hanan discussed the development of medical technicians and their organizations from the beginning until the present time.

Palmer R. Bowdish, M.D., Marshall, was the guest speaker at the meeting of the Benton school parent-teacher association on January 15. Dr. Bowdish gave a talk concerning mental health of children.

SECOND ANNUAL MISSOURI STATE SURGICAL SOCIETY LECTURESHIP

The Missouri State Surgical Society takes pleasure in announcing its Second Annual Lectureship.

The guest speaker for this Second Annual meeting will be Dr. Alton Ochsner, M.D., Professor of Surgery, Tulane University, New Orleans, Louisiana. His subject will be "Ulcerating Lesions of the Stomach and Duodenum."

The meeting will be held on the 3rd floor of the Kansas City Club, 13th & Baltimore, Monday evening, April 6, 1959. A cocktail party at 6:30 to be followed by dinner at 7:30 will precede the scientific session.

For members of the Missouri State Medical Association not members of the Surgical Society who wish to attend this meeting please contact Dr. Claude Hunt, Professional Building, Kansas City, Missouri, for reservations.

MISSOURI SOCIETY OF INTERNAL MEDICINE TO HOLD LUNCHEON MEETING

The Missouri Society of Internal Medicine will hold a luncheon meeting at the Muehlebach Hotel, Wednesday noon, April 8. The Society is sponsoring the talk to be given by Dr. C. H. Millikan on Wednesday morning at 11:00 a.m. Dr. Millikan's subject will be "Present Day Concepts in the Treatment of Occlusive Cerebral Vascular Disease."

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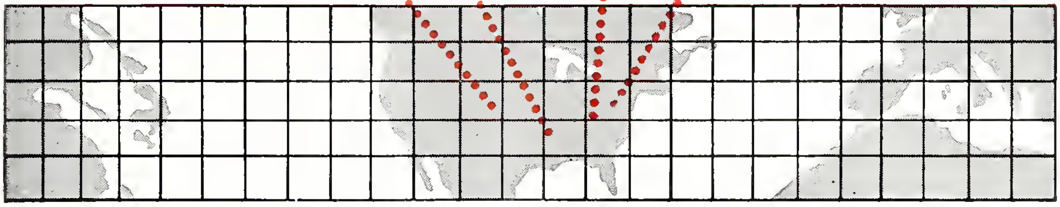

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Supplied: Tablets, bottles of 100. Syrup, pint bottles. Parenteral Solution, 10 cc. multiple-dose vials.

References: 1. Smigel, J. O., et al.: J. Am. Ger. Soc., in press. 2. Freedman, A. M.: Pediat. Clin. North America 5:573 (Aug.) 1958. 3. Ayd, F. J., Jr.: New York J. Med. **57**:1742 (May 15) 1957. 4. Menger, H. C.: New York J. Med. **58**:1684 (May 15) 1958. 5. Coirault, M., et al.: Presse méd. **64**:2239 (Dec. 26) 1956. 6. Bayart, J.: Presented at the International Congress of Pediatrics, Copenhagen, Denmark, July 22-27, 1956.

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Councilor District News

FIRST COUNCILOR DISTRICT

DONALD M. DOWELL, CHILLICOTHE, COUNCILOR

Grand River Medical Society

The Grand River Medical Society met January 8, 1959, at the Strand Hotel in Chillicothe. Despite the bad weather and an unusual amount of illness among the membership, fourteen members and eleven Auxiliary members were present.

The speaker was H. M. Hardwicke, M.D., Jefferson City, acting Director of Missouri Division of Health. He was accompanied by Dr. C. A. Lakaytis, State District Health Officer from Cameron. Dr. Hardwicke spoke at length on the duties and policies of the State Health Department, after which the meeting continued with questions and general discussion. It was a good meeting and the members were glad to have the opportunity of discussing the many public health problems with the director.

Dr. John R. Dixon, who is a member of the MSMA Committee to study Organizational Representation, reported on the work of the committee and the progress they have made.

The minutes of the last meeting were read and approved.

E. A. Duffy, M.D., Secretary, was unable to attend the meeting because of illness.

WM. A. FUSON, M.D., *Acting Secretary*

SECOND COUNCILOR DISTRICT

B. L. MURPHY, HANNIBAL, COUNCILOR

Chariton-Macon-Monroe-Randolph County Medical Society

The regular monthly dinner meeting of the Chariton-Macon-Monroe-Randolph County Medical Society was held Thursday evening, January 8, at the Woodland Hospital, Moberly, with the newly elected President, C. C. Weger, M.D., of Keytesville presiding.

Following the business meeting the program consisted of the presentation and discussion of interesting and unusual cases by F. A. Barnett, M.D., Paris: "Kaposi's Sarcoma or Multiple Hemorrhagic Hemangioma"; Robert Hasson, M.D., Moberly: "Hypothyroidism in a 3 Year Old Child Diagnosed by Carpal Bone Study"; C. C. Cohrs, M.D., Moberly: "Right Carotid Artery Insufficiency Treated by Endarterectomy"; J. W. Fleming, Jr., M.D., Moberly: "Anticoagulant Therapy in Cerebral and Coronary Thrombosis With Presentation of Cases," and the surgical discussion of the latter by A. P. Rowlette, M.D., Moberly.

Members present were Dr. G. C. Rice and Dr. Dan Stuart, Brunswick; Dr. C. C. Weger, Keytesville; Dr. James Campbell and Dr. Donald Eggleston, Macon; Dr. F. A. Barnett, Paris; Dr. P. V. Dreyer, Huntsville; Dr. F. L. Harms and Dr. George Hawkins, Salisbury; Drs. Josephine Baker, W. D. Chute, C. C. Cohrs, J. W. Fleming, Jr., T. S. Fleming, Robert Hasson, L. K. Huber, C. C. Smith, A. P. Rowlette, and S. R. Szymanski, Moberly.

JOSEPHINE D. BAKER, M.D., *Secretary*

FOURTH COUNCILOR DISTRICT

JOSEPH C. CREECH, TROY, COUNCILOR

Jefferson County Medical Society

The Jefferson County Medical Society held its monthly meeting on January 27 at the Jefferson Memorial Hospital. The president, R. H. Donnell, M.D., Crystal City, called the meeting to order at 8:30 p.m. Doctors present were: Drs. Allbee, R. H. Donnell, T. A. Donnell, Fallet, Mayfield, McKinstry, Rutledge, Senn, Sexauer and Yoskit.

The scientific program was given by Dr. Joseph C. Edwards, St. Louis, who is instructor in clinical medicine at Washington University Medical School. He spoke on "Recent Advances in the Management of Hypertension." His talk was well received and there was considerable discussion afterwards.

Some of the doctors present complained that they had received notices from the State Board of Health that the State Health Laboratories, because of insufficient funds, had proposed discontinuance of the serology tests for syphilis. Everyone present felt that this would be an extremely bad thing to do and it was pointed out that most of the tests in this county at least, were on prenatal cases and premarital applicants. Serology tests in these cases is considered by the doctors of our Society to be one of the most important of all the functions of the Health Department.

A motion was made by Dr. Senn and seconded by Dr. McKinstry that the secretary be authorized on behalf of the Society to write a letter of protest to Dr. Hardwicke, State Health Director, and Dr. Rice of our County Health Department. The motion was carried unanimously.

JOHN F. RUTLEDGE, M.D., *Secretary*

Lincoln-St. Charles County Medical Society

C. Read Boles, M.D., St. Louis, spoke at a dinner meeting of the Lincoln-St. Charles County Medical Society at the Southern Air in Wentzville on Tuesday night, January 27. His subject was

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Mysteclin-V strikes directly at all tetracycline sensitive organisms — most pathogenic bacteria, certain large viruses, Endamoeba histolytica. It provides all benefits of tetracycline in the effective phosphate complex form.[1] Patient response is rapid because initial high peak blood serum levels may be maintained easily at the antibacterial attack level until the infection is conquered.

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Mysteclin-V protects patients against antibiotic induced intestinal moniliasis and its complications, including vaginal and anogenital moniliasis. This protection is provided by Mycostatin, the antifungal antibiotic, with specific action against Candida (Monilia) albicans.[2]

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Suspension (125 mg./125,000 u per 5 cc.), 2 oz. bottles.
Pediatric Drops (100 mg./100,000 u per cc.), 10 cc. dropper bottles.

References: 1. Crunk, G. A.; Naumann, D. E., and Casson, K.: Antibiotics Annual 1957-1958, New York, Medical Encyclopedia Inc. 1958, p. 397 • 2. Newcomer, V. D.; Wright, E. T., and Sternberg, T. H.: Antibiotics Annual 1954-1955, New York, Medical Encyclopedia Inc., 1955, p. 686.

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Dr. Boles spoke at the meeting.

"Pediatric Immunizations." Dr. Boles presented this subject in an interesting informative way which stimulated audience participation.

Fifteen physicians and guests were in attendance to enjoy the evening's schedule of festivities which included a social hour, an excellent steak dinner, the scientific program and a short business session.

Paul Rother, M.D., *Secretary*

SIXTH COUNCILOR DISTRICT

C. G. STAUFFACHER, SEDALIA, COUNCILOR

Joint Medical Societies Meeting

A joint dinner meeting of the Henry, Johnson, Pettis, Saline, Lafayette-Ray and adjacent County Medical Societies and the doctors' wives was held Wednesday night, January 28, at the Country Club in Warrensburg. The meeting had been previously scheduled for January 21, but postponed because of adverse elements of winter.

The speaker and officers were seated at a head table.

The evening festivities began with a social hour, followed by dinner and the program. Maxwell G. Berry, M.D., Kansas City, presented the scientific program. He spoke on the subject "Facts and Fancies About Atherosclerosis." His treatment of this important topic brought forth numerous questions from the audience which contributed to an interesting and informative treatment of the subject.

A special program was held separately for the ladies. This consisted of a debate presented by the excellent debate team of the State College at Warrensburg.

Despite the remnants of snowy weather, some 50 people including doctors and their wives and guests were in attendance to enjoy the evening's offerings.

Dr. Max Berry, Kansas City, presented the program.

C. G. Stauffacher, M.D., *Councilor*

West Central Missouri Medical Society

Martin J. Mueller, M.D., Kansas City, spoke at a dinner meeting of the West Central Missouri Medical Society and the doctors' wives at the Country Club in Nevada on Thursday night, January 8. Dr. Mueller gave an interesting discussion on the subject "Diabetes." Questions and discussion by a number of those in the audience was evidence of the interest and thought provoked by Dr. Mueller's formal talk.

As a part of the business session of the meeting, Roy W. Pearse, Jr., M.D., Nevada, announced a symposium on Chest Diseases sponsored by the Southwest Missouri Chapter of the Missouri Academy of General Practice and cosponsored by the Missouri Chapters of the American Trudeau Society and American College of Chest Physicians at the Mount Vernon Sanatorium, January 17 and 18. Dr. Pearse stated that all members of the Missouri State Medical Association received the program and where invited to attend.

Jack Moody, M.D., *Secretary*

STOP running noses

and open stuffed noses orally

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- in postnasal drip
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safer and more effective than topical medication

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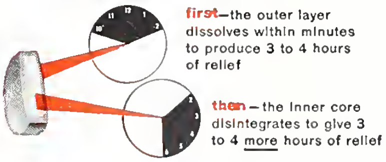

first—the outer layer dissolves within minutes to produce 3 to 4 hours of relief

then—the inner core disintegrates to give 3 to 4 more hours of relief

Each TRIAMINIC *Tablet provides:*

Phenylpropanolamine HCl . . .	50 mg.
Pheniramine maleate	25 mg.
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One-half of this formula is in the outer layer, the other half is in the core.

Dosage: One tablet in the morning, mid-afternoon and in the evening, if needed.

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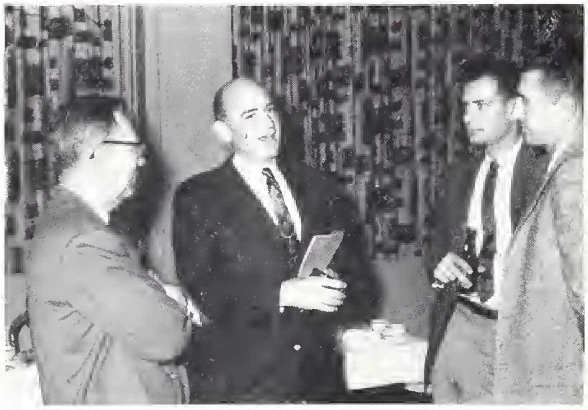
EIGHTH COUNCILOR DISTRICT

W. W. TILLMAN, SPRINGFIELD, COUNCILOR

Jasper County Medical Society

A dinner meeting of the Jasper County Medical Society was held at the Drake Hotel in Carthage on Tuesday night, January 13. A social hour at 6:30 p.m. preceded dinner and the scientific program.



Dr. Thorpe Ray, Columbia, was the speaker.

Some 45 members were present to enjoy the occasion and to have the opportunity of hearing an excellent scientific discussion on "Diuretic Therapy" by Thorpe Ray, M.D., professor and chairman of the department of medicine of the University of Missouri at Columbia.

The program followed dinner.

Dr. Ray answered numerous questions following his formal discussion. This is the first time that Dr. Ray has spoken before the Jasper County Medical Society and it was a real pleasure to have him present such a well received program.

The council of the Society met preceding dinner and presented a number of important items to the regular business meeting of the Society following the scientific program.

John W. Koehler, M.D., *Secretary*

NINTH COUNCILOR DISTRICT

J. H. SUMMERS, LEBANON, COUNCILOR

South Central Counties Medical Society

The South Central Counties Medical Society met at the Texas County Memorial Hospital on Wednesday night, January 28.

Dr. Warford Johnson, Springfield, was guest speaker for the evening. He gave an interesting and educational talk on "Coronary Artery Disease."

Following the scientific session a short business session was held. Mr. James Featherston, Blue Cross and Blue Shield Representative, was presented and he explained the possibility of the group adding Blue Shield coverage to the Society's already existing Blue Cross plan. The Society voted to add Blue Shield to the Blue Cross plan.

The following officers were elected for 1959: Dr. Joe Spears, Cabool, assumed the duties as president; Dr. Harold Miller, Willow Springs, was chosen as president-elect; and Dr. Rollin H. Smith, West Plains, was reelected as secretary of the society.

The following were elected as delegates to the state association meeting in Kansas City in April of this year: Ozark County, Dr. Deborah Doone, Bakersfield; Douglas County, Dr. Marvin Gentry, Ava; Wright County, Dr. R. W. Denney, Mountain Grove, as delegate and Dr. S. W. Connor, Mountain Grove, as alternate; Texas County, Dr. T. J. Burns, Houston, as delegate and Dr. Joe Spears, Cabool, as alternate; Howell County, Dr. C. F. Callihan, West Plains, as delegate, and Dr. D. E. Tiffany, Mountain View, as alternate; Oregon County, Dr. C. W. Cooper, Thayer, as delegate.

Twelve members of the Society and the wives of several of them together with Dr. and Mrs. Warford Johnson of Springfield, and Mrs. James Featherston (Blue Cross) of Poplar Bluff were present for the meeting.

The next meeting will be on February 25 in Mountain View with Dr. D. E. Tiffany as host.

Rollin H. Smith, M.D., *Secretary*

HOSPITAL ALUMNI TO MEET

The St. Louis City Hospital Alumni Association will hold its 71st annual meeting on Monday, March 9, at the LeChateau Restaurant, 10405 Clayton Road, St. Louis County. The American College of Surgeons will be meeting in St. Louis at the same time so the alumni of the hospital will be able to attend this annual dinner party.

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MISSOURI STATE MEDICAL ASSOCIATION

The 101st Annual Session of the Missouri State Medical Association will be held at Hotel Muehlebach, Kansas City, April 5, 6, 7, 8, 1959.

TIME AND PLACE OF MEETINGS

Sunday, April 5

12:30 p.m. Registration for House of Delegates, Grand Ball Room.
1:30 p.m. House of Delegates, Colonial Ball Room.
3:30 p.m. Reference Committee Meetings, Colonial Ball Room, Rooms 362, 363, 364, 365.

Monday, April 6

8:00 a.m. Registration, Grand Ball Room.
9:00 a.m. Motion picture, Colonial Ball Room.
9:30 a.m. Scientific Session, Colonial Ball Room.
10:30 a.m. Intermission to View Exhibits, Grand Ball Room.
11:00 a.m. Scientific Session, Colonial Ball Room.
12:00 noon. Committee on Maternal Welfare Luncheon, Music Room.
2:00 p.m. Scientific Session, Colonial Ball Room.
3:00 p.m. Intermission to View Exhibits, Grand Ball Room.
3:30 p.m. Scientific Session, Colonial Ball Room.
4:30 p.m. House of Delegates, Colonial Ball Room.
5:15 p.m. Reference Committee Meetings, Colonial Ball Room, Rooms 362, 363, 364, 365.
6:30 p.m. Committee on Diabetes and Missouri Diabetes Association Dinner, Tea Room.
6:30 p.m. Missouri State Surgical Society Dinner, Kansas City Club.

Tuesday, April 7

8:00 a.m. Registration, Grand Ball Room.
9:00 a.m. Motion picture, Colonial Ball Room.
9:30 a.m. Instruction Courses, Rooms T21, T22, 362, 363, 364, 365.
10:30 a.m. Intermission to View Exhibits, Grand Ball Room.
11:00 a.m. Scientific Session, Colonial Ball Room.
12:00 noon. University of Missouri Medical Alumni Luncheon, Trianon Room.
2:00 p.m. Scientific Session, Colonial Ball Room.
3:00 p.m. Intermission to View Exhibits, Grand Ball Room.
3:30 p.m. Scientific Session, Colonial Ball Room.
7:30 p.m. Annual Banquet, Terrace Grill.

Wednesday, April 8

8:00 a.m. Registration, Grand Ball Room.
9:00 a.m. Motion picture, Colonial Ball Room.
9:30 a.m. Scientific Session, Colonial Ball Room.
10:30 a.m. Intermission to View Exhibits, Grand Ball Room.
11:00 a.m. Scientific Sessions, Rooms 362, 363, 364.
12:00 noon. Missouri Society of Internal Medicine Luncheon, Tea Room.
1:30 p.m. House of Delegates, Trianon Room.

PROGRAM

Sunday, April 5, 1959

1:30 p.m. House of Delegates, Colonial Room, Hotel Muehlebach.

3:30 p.m. Reference Committee meetings, Hotel Muehlebach.

Monday, April 6, 1959

Colonial Ball Room, Hotel Muehlebach.

9:00 a.m. Motion picture: Dermatologic Office Procedures for the General Practitioner.

W. F. Francka, M.D., Hannibal, Presiding.

9:30 a.m. Panel: Staphylococcus Infections in Hospitals.
Moderator: Ralph A. Kinsella, Sr., M.D., St. Louis.
Panelists: Clement E. Brooke, M.D., Columbia.
Harvey R. Bernard, M.D., St. Louis.
R. P. Wright, M.D., Kansas City.
Frank R. Bradley, M.D., St. Louis.

10:30 a.m. Intermission to View Exhibits, Grand Ball Room.

Ralph Perry, M.D., Kansas City, Presiding.

11:00 a.m. Cardiac Arrhythmias, Michael Bernreiter, M.D., Kansas City.

All age groups and both sexes are equally prone to disturbances of the heart beat. Irregular heart action may produce no symptoms in some patients and be the cause of great anxiety in others. These disorders may be quite harmless at times, but lead quickly to cardiac failure and death in some patients. Correct diagnosis of the type of arrhythmia is essential before proper therapy can be instituted. The final diagnosis depends on the electrocardiographic findings. Slides will demonstrate sinus arrhythmia, sinus bradycardia, sinus tachycardia, auricular premature contractions, auricular paroxysmal tachycardia, auricular flutter, auricular fibrillation, nodal rhythm, ventricular premature contractions and ventricular tachycardia.

11:15 a.m. The Diagnosis and Management of Polycythemia, George E. Thoma, M.D., St. Louis.

A brief résumé of the salient clinical findings and significant laboratory tests are presented. These are discussed from the standpoint of the differential diagnosis of polycythemia. The general management plan of this disease is outlined. The rationale, method and efficacy of radioactive phosphorus (P-32) as the principle therapeutic agent is presented and discussed in detail.

11:30 a.m. Idiopathic Ulcerative Colitis, F. B. Campbell, M.D.; J. G. Campbell, M.D., and Joe E. Hirsch, M.D., Kansas City.

Four hundred cases of ulcerative proctitis and proctocolitis are reviewed. Ulcerative proctitis, the first stage of ulcerative colitis, is common and relatively few of the cases progress to intractable colitis. The most effective medical treatment is presented. Indications for colectomy and permanent ileostomy are listed.

11:45 a.m. Adult Diabetes Mellitus: Four Years' Experience With Oral Hypoglycemic Agents in Treatment, Norman W. Drey, M.D., St. Louis.

This presentation includes the clinical management of 66 adult diabetic patients who have been taking tolbutamide over a four-year period. The study includes clinical observation from the standpoint of diabetic control and careful observation for any toxic manifestation involving dermatologic aspects, gastrointestinal, nervous system, hematologic, hepatotoxic, and renal toxicity studies. This includes observation of needle biopsy material of the liver taken both before and during therapy. The study also includes 32 patients similarly observed on chlorproparnide.

12:00 noon. Committee on Maternal Welfare Luncheon Meeting, Music Room.

Scientific Session, Colonial Ball Room.

John A. Growdon, M.D., Kansas City, Presiding.

2:00 p.m. Working Together for an Improved Missouri Mental Health Program, Addison M. Duval, M.D., Washington, D. C.

In this first official address, the new Director of Missouri's Division of Mental Diseases outlines the basic objectives of a state mental health program. These are (1) to provide modern care and treatment to the mentally ill not otherwise provided, and (2) to establish a program of prevention of mental illness with its accompanying disability. The present status of the state program is presented with a description of the deficiencies and the assets which constitute the base from which a program will be planned. Both long-range and short-range plans must be formulated for proper goals to be reached. Responsibility of government—city, county and state—for its share of the mental health function must be properly assumed. The Division staff will be responsible for the leadership and organization functions in developing mental health programs, but it is believed that success cannot come without the support of organized medicine.

2:30 p.m. The Increasing Menace of Carcinoma of the Lung, Alton Ochsner, M.D., New Orleans, La.

3:00 p.m. Intermission to View Exhibits, Grand Ball Room.

3:30 p.m. Clinical Pathologic Conference, Ferdinand C. Helwig, M.D., Kansas City, Moderator.

4:30 p.m. House of Delegates.

Tuesday, April 7, 1959

9:00 a.m. Motion picture: Control of Severe Pain.

9:30 a.m. Instruction Courses.

Anesthesiology, Including Complications, Kenneth K. Keown, M.D., Columbia. Room 362.
Management of Injuries of the Back and Knee, Richard H. Kiene, M.D., Kansas City. Room 363.
Use of Diuretics, Hubert M. Parker, M.D., Kansas City. Room 364.
Diagnosis of the Acute Abdomen, Ned D. Rodes, M.D., Mexico. Room 365.
Urinary Tract Infections in Children, Eugene J. Schwartz, M.D., Springfield. Room T21.
Pelvic Pain and Hemorrhage in Women, Gerald L. Miller, M.D., Kansas City. Room T22.

10:30 a.m. Intermission to Visit Exhibits, Grand Ball Room.

Scientific Session, Colonial Ball Room.

Milton T. English, M.D., Kirksville, Presiding.

11:00 a.m. Esophageal Hiatal Hernia, James H. Growdon, M.D., Little Rock, Arkansas.

Esophageal hiatal hernia is a common disorder. It is often a progressively disabling condition that may even threaten life. Prolonged ineffective medical management may prove disastrous. Proper selection of patients for operation requires careful correlation of symptoms with the pathology present. This may prove to be a perplexing problem which tests the acumen of the physician. These matters will be considered.

11:30 a.m. Abnormal Uterine Bleeding, Roy G. Holly, M.D., Omaha, Nebr.

The problem is defined as any uterine bleeding which varies in time, amount or duration from a normal menstrual pattern. Confusion exists for several reasons: (1) endometrial morphology not completely known; (2) total picture of pituitary, ovarian, endometrial relationship not complete, and (3) nomenclature varied.

Classification and diagnostic tools are discussed. Illustrative case examples are presented emphasizing diagnosis and therapy of endometrial polyps, irregular shedding and anovulatory bleeding.

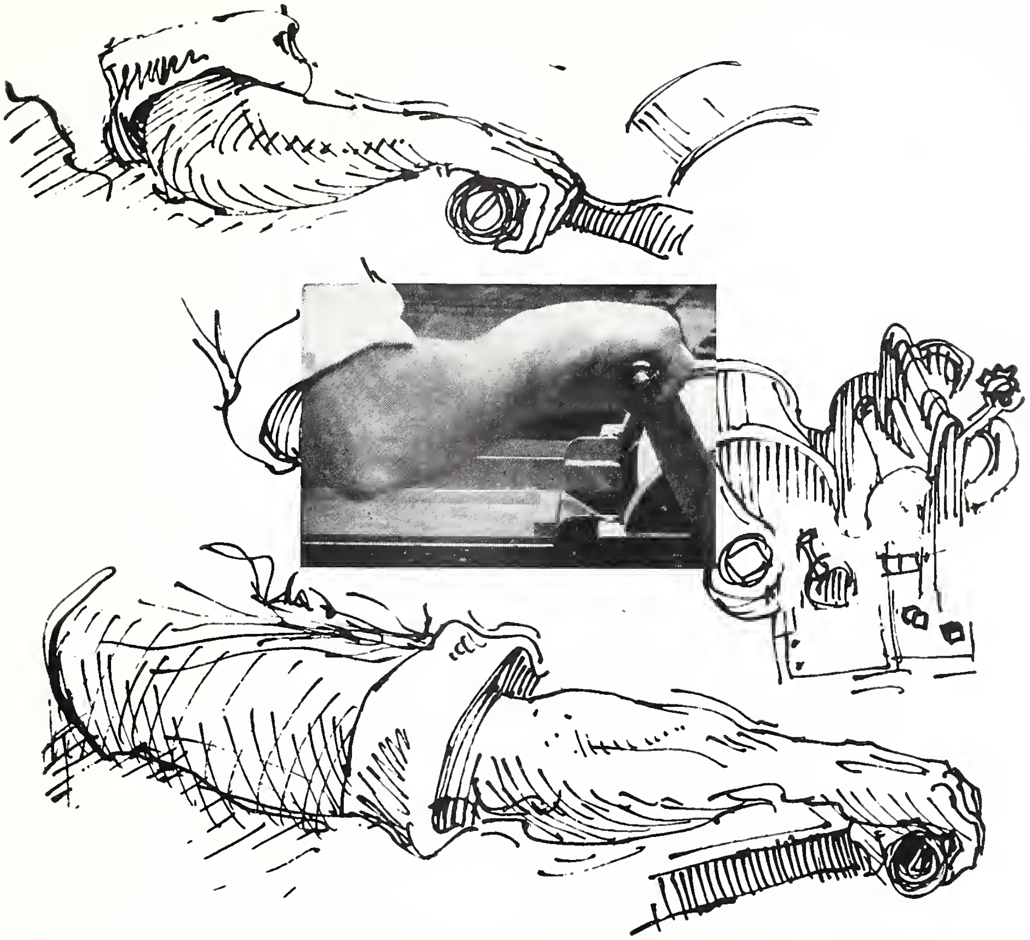
12:00 noon. University of Missouri Medical Alumni Luncheon, Trianon Room.

Scientific Session, Colonial Ball Room.

James C. Cope, M.D., Columbia, Presiding.

2:00 p.m. Pancreatitis, E. E. Wollaeger, M.D., Rochester, Minn.

2:30 p.m. Recent Advances in Roentgenology of the Biliary System, Lester W. Paul, M.D., Madison, Wis.



To the relief of musculoskeletal pain, new MEDAPRIN* adds restoration of function

Analgesics offer temporary relief of musculoskeletal pain, but they merely *mask* pain rather than getting at its *cause*. New Medaprin, in addition to bringing about prompt subjective improvement, promotes the *restoration of normal function* by suppressing the inflammation that *causes* the pain.

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Dosage: The recommended dosage is 1 tablet q.i.d. The usual cautions and contraindications of corticotherapy should be observed.

Supplied: In bottles of 100 and 500.

Formula: Each Medaprin tablet contains

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Since the advent of oral cholecystography some thirty years ago there has been continuing improvement in technics and contrast media so that today the examination can be considered one of the most reliable of the roentgen methods of examination. Current procedures used in examination of the gallbladder and the interpretation of cholecystograms will be discussed. Methods used to opacify the biliary duct system, will also be described, including the use of oral contrast media. Mention will be made of methods used to opacify the liver and the place of these in the investigation of patients with biliary tract disease.

3:00 p.m. Intermission to View Exhibits, Grand Ball Room.

3:30 p.m. Panel. Moderator: Hector W. Benoit, M.D., Kansas City.
Panelists: Guest Speakers.

7:30 p.m. Annual Banquet in Honor of Past Presidents.
Speaker: Dr. Carl W. Winters, Oak Park, Illinois.

Wednesday, April 8

8:00 a.m. Registration, Grand Ball Room.

9:00 a.m. Motion picture: Hemorrhoids or Piles, and the Early Detection of Rectal Cancer.

Scientific Session, Colonial Ball Room.

W. O. Finney, M.D., Chaffee, Presiding.

9:30 a.m. The Management of the Migraine Headache Patient, Robert E. Ryan, M.D., St. Louis.

Migraine is probably the most common form of vascular headache seen in the practice of medicine. To give the patient the proper treatment the correct diagnosis must be made. For the proper diagnosis, the most important factor is for the patient to give the physician a good history of his headache problem. If the physician knows the symptomatology of migraine and a good case history is obtained, the diagnosis should be made without difficulty. Treating migraine, like any form of headache problem, should be twofold. The physician should both (1) prevent any future attacks from occurring and (2) give the patient something to abort his present headache attack.

9:45 a.m. The Surgical Treatment of Peptic Ulcer, Russell J. Crider, M.D., and Ben L. Neubeiser, M.D., St. Charles.

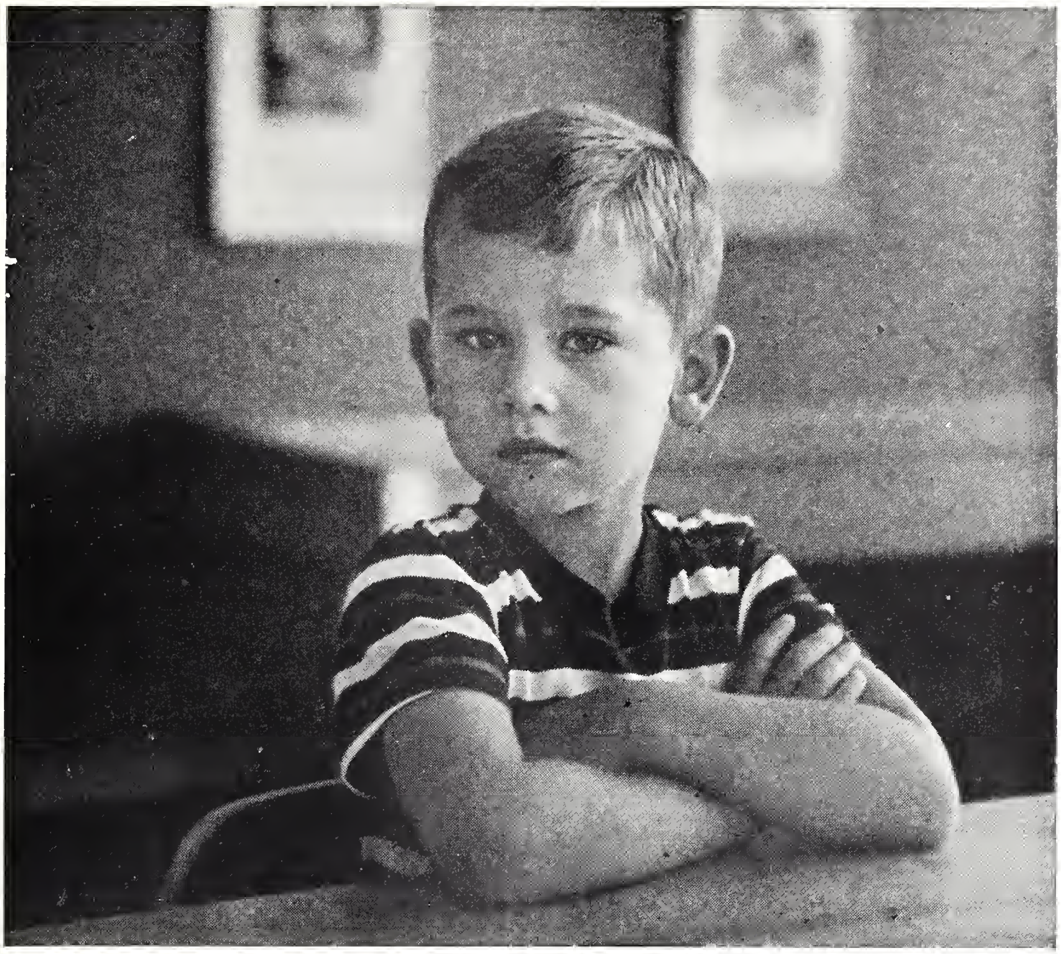
The surgical treatment of peptic ulcer has as its primary aim the eradication, or healing, of the ulcer. Extensive studies have shown that there are several surgical procedures which will accomplish this with almost equal facility. Many factors should enter into the selection of the type of operative procedure to be used. The same procedure will not give the same results in all types of patients. Such factors as age, habitus, symptoms and complications, location of the ulcer, temperament and occupation, may influence the type of procedure to be chosen. Choice of the wrong procedure may leave the patient a gastric cripple—little or no better off than with an ulcer. This study is made to show that by careful evaluation, a more intelligent individual approach in the choice of procedure can be made, with less chance of disabling side effects. More than 200 operative cases are included in this study.

10:00 a.m. The Limited Use of Steroids in Allergic Diseases, Stanley L. Goldman, M.D., Kansas City.

Frequently today steroid treatment is used before other methods of treatment have been attempted or given an adequate trial. Often the long term use of steroids is used without any attempt to isolate the allergen causing the disease or attempting to control this allergen. Steroid treatment, both long term and short term, is useful under certain circumstances but is definitely a situation fraught with many dangers. A long series of patients with allergic disease has been reviewed and the small incidence of patients requiring steroid treatment is noted with an explanation of the need in each case.

10:15 a.m. The Management of Carcinoma of the Lip, E. J. Schewe, Jr., M.D., Columbia.

The presentation will include discussion of (1) incidence and etiologic



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factors, (2) clinical features, (3) selection of treatment methods (radiotherapy versus surgery), (4) management of metastases, (5) prognosis. Colored slides will illustrate representative lesions and treatment methods.

10:30 a.m. Intermission to Visit Exhibits, Grand Ball Room.

11:00 a.m. Present Day Concepts in the Treatment of Occlusive Cerebral Vascular Disease, Clark H. Millikan, M.D., Rochester, Minn. Sponsored by the Missouri Society of Internal Medicine. Room 362.

11:00 a.m. Panel: Office Psychiatry.
The Referral: Making the Examination and Diagnosis, Arnold S. Block, M.D., St. Louis.
Psychotherapy: Principles, Technics and Types, Kenneth D. Michael, M.D., St. Louis.
Emergency Treatment and Planning With Family and Community Members, Leopold Hofstatter, M.D., St. Louis.
Sponsored by the St. Louis Society of Neurology and Psychiatry. Room 363.

11:00 a.m. Panel: Modern Treatment of Tuberculosis: Drugs-Surgery; Hospital-Home.
Moderator: Florence E. MacInnis, M.D., Kansas City.
Internal Medicine, Paul Murphy, M.D., St. Louis.
Home Treatment, I. J. Flance, M.D., St. Louis.
Hospital Treatment, Bernard Friedman, M.D., St. Louis.
Nursing, Lucille C. Becker, R.N., Jefferson City.
Surgery, John W. Polk, M.D., Springfield.
Pediatrics, R. W. Latham, M.D., Kansas City.
Pathology, Charles B. Wheeler, M.D., Kansas City.
Sponsored by the Missouri Tuberculosis Association. Room 364.

1:30 p.m. House of Delegates, Trianon Room.

DELEGATES

County Society	*Delegate*	*Alternate*
Andrew		
Audrain	Harold D. Lankford, Mexico	Benjamin N. Jolley, Mexico
Barton-Dade		
Barton-Dade		
Benton	T. S. Reser, Cole Camp	James A. Logan, Warsaw
Boone	M. Pinson Neal, Columbia	C. M. Waggoner, Columbia
Boone	James C. Cope, Columbia	Joseph E. Flynn, Columbia
Buchanan	Joseph L. Fisher, St. Joseph	Manning E. Grimes, St. Joseph
Buchanan	Ernest E. Wadlow, St. Joseph	John N. Martin, St. Joseph
Butler-Ripley-Wayne		
Butler-Ripley-Wayne		
Butler-Ripley-Wayne		
Callaway		George Wood, Fulton
Camden		
Cape Girardeau	H. V. Ashley, Jr., Cape Girardeau	Paul Wolff, Cape Girardeau
Carter-Shannon		
Carter-Shannon		
Chariton-Macon-Monroe-Randolph	George W. Hawkins, Salisbury	G. C. Rice, Brunswick
Chariton-Macon-Monroe-Randolph	James E. Campbell, Macon	D. E. Eggleston, Macon
Chariton-Macon-Monroe-Randolph	F. A. Barnett, Paris	G. M. Ragsdale, Paris

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Cole	George D. Shull, Jefferson City	John W. McHaney, Jefferson City
Cooper		
Dallas-Hickory-Polk		
Dallas-Hickory-Polk		
Dallas-Hickory-Polk		
Dunklin	W. D. English, Cardwell	C. R. Peck, Kennett
Franklin-Gasconade-Warren	John F. Pearl, St. Clair	Frank G. Mays, Washington
Franklin-Gasconade-Warren-	George Workman, Hermann	Paul A. Brenner, Owensville
Franklin-Gasconade-Warren	H. H. Schmidt, Marthasville	H. W. Eyerman, Warrenton
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Caldwell		
Livingston		
Carroll		
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Harrison		
Linn		
Mercer		
DeKalb		
Greene	Stanley S. Peterson, Springfield	Arch Lowe, Jr. Springfield
Greene	John P. Ferguson, Springfield	Don F. Gose, Springfield
Greene	Kenneth E. Knabb, Springfield	F. T. H'Doubler, Springfield
Henry	William Bradshaw, Clinton	Neal McIntyre, Clinton
Howard		
Jackson	James D. Bennett, Kansas City	Robert E. Allen, Kansas City
Jackson	Hector W. Benoit, Kansas City	Raymond B. Anderson, Kansas City
Jackson	John F. Bowers, Kansas City	John D. DeMott, Kansas City
Jackson	Dillard M. Eubank, Raytown	William R. Eubank, Raytown
Jackson	Robert W. Forsythe, Kansas City	Charles F. Grabske, Jr., Independence
Jackson	William W. Gist, Kansas City	Frederick H. Hartwig, Kansas City
Jackson	John A. Growdon, Kansas City	Clarke L. Henry, Kansas City
Jackson	James A. Jarvis, Kansas City	William H. Hickerson, Independence
Jackson	William M. Kitchen, Kansas City	Gerald E. Hughes, Kansas City
Jackson	John H. Mayer, Jr., Kansas City	Edward H. Klein, Kansas City

Lowers blood pressure — maintains mental alertness

calms the patient under stress

Rautensin provides a smooth, gradual and sustained reduction of blood pressure without sudden rebounds or abrupt declines.[1] Rautensin's tranquilizing properties calm the tense and anxious hypertensive without impairing alertness, without producing excessive lethargy or drowsiness.

The risk of Rauwolfia-induced depression is markedly reduced since the alseroxylon fraction alone is used.[2] Even on long-term administration side actions "...are either completely absent or so mild as to be inconsequential."[3]

Rautensin®

Each tablet contains 2 mg. of the purified alseroxylon
complex of Rauwolfia serpentina

1. Wright, W. T., Jr.; Pokorny, C., and Foster, T. L.: Kansas M. Soc. *57*:410, 1956. 2. Gilchrist, A. R.: Brit. M. J. *2*:1011 (Nov. 3), 1956. 3. Terman, L. A.: Illinois M. J. *3*:67, 1957.

SMITH-DORSEY • a division of The Wander Company • Lincoln, Nebraska

Jackson	Frederick J. McCoy, Kansas City	M. Donald McFarland, Kansas City
Jackson	William C. Mixson, Kansas City	James R. McVay, Jr., Kansas City
Jackson	Joseph C. Williams, Jr., Kansas City	Paul C. Quistgard, Kansas City
Jackson	Raymond L. Morrow, Kansas City	Russell D. Shelden, Kansas City
Jackson		Warren F. Wilhelm, Kansas City
Jasper	S. W. Scorse, Joplin	M. F. Whitton, Carthage
Jasper	W. T. McNew, Carthage	R. M. Ferguson, Webb City
Jefferson	Frank L. Kozal, Crystal City	James Mayfield, Crystal City
Johnson		
Lafayette-Ray	W. E. Martin, Odessa	W. E. Fulkerson, Higginsville
Lafayette-Ray	George K. Davault, Richmond	M. C. Johnson, Richmond
Lewis-Clark-Scotland	P. W. Jennings, Canton	L. Y. Davis, Canton
Lewis-Clark-Scotland	J. R. Bridges, Kahoka	
Lewis-Clark-Scotland		
Lincoln-St. Charles	E. Dameron, Elsberry	L. P. Hetlage, Troy
Lincoln-St. Charles	P. H. Rother, St. Charles	William Poggemeier, St. Charles
Marion-Ralls-Shelby	R. J. Lanning, Hannibal	R. M. Strong, Hannibal
Marion-Ralls-Shelby		
Marion-Ralls-Shelby		
Mid-Missouri		
Phelps	W. R. Lytle, Rolla	James D. Butts, Rolla
Crawford	F. A. Elders, Cuba	A. R. Baumann, Steelville
Dent	B. J. Bass, Salem	M. M. Hart, Salem
Pulaski	C. S. Miller, Waynesville	
Maries	None	
Laclede	H. W. Carrington, Lebanon	R. W. Froelich, Lebanon
Miller	W. L. Allee, Eldon	
Mineral Area		
St. Francois		
Iron		
Madison		
Washington		
Reynolds		
Ste. Genevieve		
Moniteau	Edgar A. Kibbee, California	Richard B. Fulks, California
Montgomery	E. J. T. Andersen, Montgomery City	S. J. Byland, Wellsville
Morgan	Jack Gunn, Versailles	R. R. Lyle, Versailles
Nodaway-Holt-Atchison-Gentry-Worth		
Nodaway-Holt-Atchison-Gentry-Worth		
Nodaway-Holt-Atchison-Gentry-Worth		

in skin disorders

Decadron*

DEXAMETHASONE

treats more patients more effectively

a new order of magnitude in corticosteroid effectiveness

a new order of magnitude in margin of safety

Striking clinical results with DECADRON are reported† in 92 percent of 319 patients with dermatological disorders, including cases previously unresponsive or resistant to corticosteroids. There were no major complications, and even minor side effects occurred in less than eight percent of patients.

Moreover, in many cases reactions induced by previous steroid therapy, such as edema, Cushingoid appearance, headache, vertigo, muscular weakness, depression, hirsutism, and glycosuria, **disappeared during therapy with DECADRON.**

†Analysis of clinical reports.

Dosage: One 0.75 mg. tablet of DECADRON will usually replace one 4 mg. tablet of methylprednisolone or triamcinolone, one 5 mg. tablet of prednisone or prednisolone, one 20 mg. tablet of hydrocortisone, or one 25 mg. tablet of cortisone.

Supplied: As 0.75 mg. and 0.5 mg. scored, pentagon-shaped tablets in bottles of 100 and 1000.

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MSD

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DIVISION OF MERCK & CO., INC., PHILADELPHIA 1, PA.

Nodaway-Holt-Atchison-Gentry-Worth		
Nodaway-Holt-Atchison-Gentry-Worth		
North Central		
Adair	J. J. Wimp, Kirksville	M. T. English, Kirksville
Schuyler	P. V. Hart, Coatsville	
Knox	Francis Tarvydas, Edina	
Sullivan	None	
Putnam	None	
Ozarks		
Barry	Mary Jane Newman, Cassville	C. H. Price, Cassville
Lawrence	Kenneth Glover, Mt. Vernon	A. J. Graves, Mt. Vernon
Stone	Fred Wommack, Crane	A. P. Capetti, Crane
Christian	S. D. Roper, Ozarks	
Taney	J. M. Threadgill, Forsyth	J. D. Bennett, Branson
Newton	M. C. Bowman, Neosho	G. W. Blankenship, Neosho
McDonald	J. J. Royce, Noel	
Pemiscot		
Perry		
Pettis	Alvin L. Lowe, Sedalia	Donald C. Proctor, Sedalia
Pike	Charles H. Lewellen, Louisiana	
Platte	E. G. Parker, Platte City	Lewis C. Calvert, Weston
St. Louis City	Alfred Sudholt, Jr., St. Louis	Bray O. Hawk, St. Louis
St. Louis City	Leonard T. Furlow, St. Louis	William A. Tibbs, Jr., St. Louis
St. Louis City	John E. Byrne, St. Louis	Thomas H. Boldt, St. Louis
St. Louis City	Robert W. Kelley, St. Louis	Carl E. Lischer, St. Louis
St. Louis City	Joseph E. VonKaenel, St. Louis	Joseph C. Edwards, St. Louis
St. Louis City	Edward M. Cannon, St. Louis	Jerome I. Simon, St. Louis
St. Louis City	Robert E. Funsch, St. Louis	Edwin C. Ernst, Jr., St. Louis
St. Louis City	David N. Kerr, St. Louis	George E. Roulhac, St. Louis
St. Louis City	Durand Benjamin, St. Louis	A. N. Arneson, St. Louis
St. Louis City	Victor E. Scherman, St. Louis	Richard W. Yore, St. Louis
St. Louis City	Sam J. Merenda, St. Louis	Grace E. Bergner, St. Louis
St. Louis City	Arthur W. Neilson, St. Louis	J. William Thompson, St. Louis
St. Louis City	George L. Hawkins, Jr., St. Louis	Lee T. Ford, Jr., St. Louis
St. Louis City	Dean Sauer, St. Louis	Willard Bartlett, St. Louis
St. Louis City	John P. Eberle, St. Louis	Frank G. Zingale, St. Louis
St. Louis City	Herbert W. Wiegand, St. Louis	Albert M. Repetto, St. Louis
St. Louis City	Paul F. Max, St. Louis	James P. Murphy, St. Louis
St. Louis City	John B. Shapleigh, St. Louis	Charles R. Doyle, St. Louis
St. Louis City	Louis H. Kohler, St. Louis	Ralph K. Earp, St. Louis
St. Louis City	J. Otto Lottes, St. Louis	Harold A. Bulger, St. Louis
St. Louis City	Max S. Franklin, St. Louis	Joseph E. Flynn, St. Louis
St. Louis City	George E. Thoma, Jr., St. Louis	Peter G. Danis, St. Louis
St. Louis City	Robert B. Bassett, St. Louis	A. J. Signorelli, St. Louis
St. Louis City	Charles S. Sherwin, St. Louis	Jackson Eto, St. Louis
St. Louis City	Robert Woolsey, St. Louis	George H. Lawrence, St. Louis
St. Louis	Emmett B. Drescher, St. Louis	William H. Bailey, St. Louis
St. Louis	Louis F. Howe, St. Louis	Edmund V. Cowdry, Jr., St. Louis
St. Louis	Joseph B. Kendis, St. Louis	B. Todd Forsyth, St. Louis
St. Louis	James R. Meador, Clayton	Richard E. Lord, St. Louis
St. Louis	Eugene R. Brown, University City	William E. Magee, Clayton
St. Louis	Oscar P. Hampton, Clayton	Michael McNalley, Clayton
St. Louis	Paul H. Whitener, St. Ann	Joseph D. O'Keefe, St. Louis
St. Louis	William H. Grundmann, St. Louis	John S. Skinner, St. Louis

"It is concluded that the addition of buffering agents to acetylsalicylic acid in the concentrations used serves no clinically detectable useful purpose."[1]

[1] Sadove, Max S. and Schwartz, Lester: An Evaluation of Buffered Versus Nonbuffered Acetylsalicylic Acid, Postgraduate Medicine; 24:183, August, 1958.

Nonbuffered Material Used—Bayer® Aspirin.

St. Louis	Robert Kingsland, Clayton	Willard B. Walker, Clayton
Saline	R. C. Haynes, Marshall	C. A. McBurney, Slater
Semo		
Stoddard		
New Madrid		
Mississippi		
Scott		
South Central		
Howell	C. F. Callihan, West Plains	D. E. Tiffany, Mtn. View
Oregon	Claude W. Cooper, Thayer	
Texas	Thomas J. Burns, Houston	Joe Spears, Cabool
Wright	R. W. Denny, Mtn. Grove	S. W. Connor, Mtn. Grove
Douglas	Marvin Gentry, Ava	
Ozark	Deborah Doan, Bakersfield	
Webster	T. M. Macdonnell, Marshfield	C. R. Macdonnel, Marshfield
West Central		
Bates	A. L. Hansen, Butler	John Cooper, Butler
Cass	O. B. Barger, Harrisonville	E. S. Jones, Harrisonville
Cedar	Robert Magee, El Dorado Springs	William Richter, Stockton
St. Clair	D. H. Giesler, Osceola	R. H. Brownsberger, Appleton City
Vernon	Roy Pearse, Nevada	Rolla Wray, Nevada

TECHNICAL EXHIBITS

Grand Ball Room, Hotel Muehlebach

Standard Process Laboratories, Milwaukee, Wis. Booth 1.

Introducing and featuring the first revolutionary specific ulcer medication to contain true cell proliferants—Anti-Gastrin. Anti-Gastrin contains colloidal isotopic cilicon, colloidal trace mineral silicates, allantoin and chlorophyll. It contains no alkalis or antispasmatics, is non-constipating and nontoxic, no contraindications, does not inhibit the normal physiology of nutrtion and digestion. Clinically proven effective in 85 per cent of refractory peptic ulcers. Provided a four year cure on 14 out of 17 cases of chronic mucous and ulcerative colitis.

Health Insurance Council, New York, N. Y. Booth 2.

The exhibit is designed to provide general information on health insurance as underwritten by insurance companies. In addition, it also makes available information on uniform claim forms for use by doctors and hospitals in support of health insurance claims.

The Upjohn Company, Kalamazoo, Mich. Booth 3.

Professional representatives of the Upjohn Company are eager to contribute to the success of the meeting. We are here to discuss with you products of Upjohn research that are designed to assist you in the practice of your profession. We solicit your inquiries and comments.

Roche Laboratories, Nutley, N. J. Booth 4.

Madribon, a completely new, low-dosage antibacterial distinguished by particular therapeutic effectiveness in upper respiratory infections. Findings in approximately 7,000 clinical subjects demonstrate that low doses of Madribon, administered at 24-hour intervals, provide good to excellent results in more than 90 per cent of patients. Madribon is characterized by a high degree of safety plus a notable absence of skin rashes.

Mead Johnson & Company, Evansville, Ind. Booth 5.

The Mead Johnson exhibit has been arranged to give you the optimum in quick service and product information. To make your visit productive, specially trained representatives are on duty to tell you about their products.

Medco Products Company. Inc., Tulsa, Okla. Booth 6.

Presenting the Medco-Sonlator. Providing a new concept in therapy by combining muscle stimulation and ultra sound simultaneously through a Single Three-Way Sound Applicator. The Medco-Sonlator is a distinct advance in the effectiveness of physical therapy in your office or hospital. A few minutes spent in our booth should prove of value to your practice.

Medical Protective Company, Fort Wayne, Ind. Booth 7.

The Medical Protective Company, originator of Professional Protection Exclusively, now in its sixtieth year, provides unexcelled coverage in any claim or suit for damages based on professional services rendered or which should have been rendered, plus unparalleled experience from the successful handling of some 78,000 claims and suits in the professional liability field.

E. R. SQUIBB & SONS, NEW YORK, N. Y. BOOTH 8.

E. R. Squibb & Sons has long been a leader in development of new therapeutic agents for prevention and treatment of disease. The results of our diligent research are available to the Medical Profession in new products or improvements in products already marketed. At Booth 8, we are pleased to present up-to-date information on these advances for your consideration.

ST. LOUIS BLUE SHIELD PLAN, ST. LOUIS. BOOTH 9.

Full information on the St. Louis Blue Shield Plan's new Selective program is available at Booth 9. The number of patients with Selective membership is growing rapidly and representatives will be happy to answer your questions about this new and extensively improved protection and about other St. Louis Blue Shield programs.

MISSOURI MEDICAL SERVICE (BLUE SHIELD), ST. LOUIS. BOOTH 9.

C. B. FLEET COMPANY, INC., LYNCHBURG, VA. BOOTH 10.

Fleet features Clysmathane, its most recent contribution in the field of medication by rectum—an advanced method of xanthine therapy. Clysmathane is a stable solution of theophylline monoethanolamine; easily retained; rapid and uniform absorption, prompt and predictable blood levels; with no rectal irritation after prolonged use.

GREAT BOOKS OF THE WESTERN WORLD, GRAND RAPIDS, MICH. BOOTH 11.

The Great Ideas Program, a new advancement in liberal education, is built around the revolutionary Syntopicon. This master-key "Idea-Indexes" all the Great Books, making it possible to find what the great writers and thinkers said about any idea in minutes. The Program will help business and professional people, students, graduates—or anyone interested in exploring the fascinating world of great ideas.

GEIGY PHARMACEUTICALS, YONKERS, N. Y. BOOTH 12.

Geigy Pharmaceuticals extends a cordial invitation to members of the Association to visit their exhibit. Reports of the most recent clinical research studies regarding Butazolidin, Preludin, Sterosan with Hydrocortisone and Dulcolax are presented by the staff in attendance.

AMERICAN FERMENT COMPANY, INC., NEW YORK, N. Y. BOOTH 13.

Have you tried Tod'L, the sudsing, emollient, antibacterial skin cleanser for the treatment and prevention of various skin affections? Also featured: Caroid and Bile Salts as a logical complement in modern methods of therapy, Falgos buffered analgesic, Alcaroid Antacid and Supligol for nonsurgical biliary problems.

THE STUART COMPANY, PASADENA, CALIF. BOOTH 14.

E. F. HUTTON & COMPANY, KANSAS CITY, MO. BOOTH 15.

Complete supply and display of recommended mutual funds. General information and pamphlets on securities and the operation of the New York Stock Exchange. Dow Jones news ticker, teletype and direct line to E. F. Hutton's Kansas City office. Up to the minute prices and information on any securities.

DOME CHEMICALS, INC., NEW YORK, N. Y. BOOTH 16.

Dome presents Acid Mantle topical corticosteroids: Cort-Dome Creme and Lotion (ph 4.6); Neo-Cort-Dome; Cor-Tar-Quin Creme and Lotion; Cort-Quin Creme; Hist-A-Cort-E and Es-A-Cort Creme for senile vaginitis, kraurosis, pruritus and leukoplakia vulvae. Dome introduces a complete acne treatment: Acne Dome Creme, Compact, Medicated Cleanser, Lotion; Domerine Shampoo; Acne-Cort-Dome; Acid Mantle, Domeboro, Vi-Dom-A-A Pillets and Vlem-Dome. Soyaloid Colloid Infant Bath, Soy-Boro Powder, and Soy-Dome Soapless skin cleanser are also shown.

THE COCA-COLA COMPANY, ATLANTA, GA. BOOTH 17.

Ice-cold Coca-Cola served through the courtesy and cooperation of the Kansas City Coca-Cola Bottling Co., Kansas City, Missouri, and the Coca-Cola Company.

DUMAS-WILSON & COMPANY, ST. LOUIS, MO. BOOTH 18.

Dumas-Wilson & Co. extends a cordial invitation to the physicians attending this Annual Session to visit our booth featuring several new specialty items of interest to the specialist as well as the general practitioner.

PFIZER LABORATORIES, BROOKLYN, N. Y. BOOTH 19.

Visit the Pfizer display which features Cosa-Tetracyn, Cosa-Terramycin and Cosa-Signemycin, Pfizer's flucosamine potentiated antibiotics. The Pfizer Representative will be pleased to provide you with information on Diabinese—a new oral hypoglycemc agent, Vistaril which is classified by the Council on Drugs of the American Medical Association as a Psychotherapeutic Antihistamine, and Darison—a new anticholinergic compound processing a high order of therapeutic effectiveness and prolonged duration of action.

BONADOXIN®

(tables and drops)

STOPS STOPS STOPS MORNING SICKNESS

BONADOXIN Tablets relieve nausea and vomiting of pregnancy in 9 out of 10,[1-7] often within a few hours.

Moreover, a controlled study of 620 cases reported that with BONADOXIN "toxicity and intolerance [are] zero."[1] BONADOXIN is rarely soporific. It is free from the risks associated with overpotent tranquilizer-antinauseants.

NOTE: BONADOXIN has also been shown highly effective in relieving nausea and vomiting associated with: anesthesia, radiation sickness, Meniere's syndrome, labyrinthitis, cerebral arteriosclerosis, and motion sickness.

Each tiny pink-and-blue BONADOXIN tablet contains:

Meclizine HCl (25 mg.) . . . for antivertiginous, antinauseant effects.

Pyridoxine HCl (50 mg.) . . . for specific metabolic replacement.

DOSAGE: usually one tablet at bedtime. Severe cases may require another dose on arising.

SUPPLIED: tiny pink-and-blue tablets, bottles of 25 and 100. Fruit-flavored, clear green syrup in 30 cc. dropper bottles.

Infant colic? BONADOXIN DROPS are antispasmodic . . . stop colic in 84%,[8-10] without the risk of belladonna and barbiturates.

Each cc. contains:
Meclizine dihydrochloride . . 8.33 mg.
Pyridoxine hydrochloride . . . 16.67 mg.

Dosage:

under 6 months	0.5 cc.	2 or 3 times daily, on the tongue, in fruit juice or water
6 months to 2 years	1.5 to 2 cc.	
2 to 6 years . .	3 cc.	
adults and children over 6	1 tsp. (5 cc.)	

References: 1. Goldsmith, J. W.: Minnesota Med. 40:99 (Feb.) 1957. 2. Groskloss, H. H., et al.: Clin. Med. 2:885 (Sept.) 1955. 3. Weinberg, A., and Werner, W. E. F.: Am. Pract. & Digest Treat. **6**:580 (April) 1955. 4. Crawley, C. R.: West. J. Surg. **8**:463 (Aug.) 1956. 5. Tartikoff, G.: Clin. Med. 3:223 (March) 1955. 6. Dunn, R. D., and Fox, L. P.: Clinical exhibit. 7. Codling, J. W., and Lowden, R. J.: Northwest Med. **57**:331 (March) 1958. 8. Dougan, H. T.: Personal communication. 9. Leonard, C. L.: Personal communication. 10. Steinberg, C. L.: Personal communication.

New York 17, N. Y.
Division, Chas. Pfizer & Co., Inc.
Science for the World's Well-Being

Carnation Milk Company, Los Angeles, Calif. Booth 20.

Carnation Company cordially invites you to visit Booth 20 where Medical Specialist representatives will be pleased to welcome old and new friends of the Missouri State Medical Association. Recent literature and information regarding Carnation Evaporated, Carnation Instant Non-Fat, and our newest product Carnalac are available. Any question pertaining to our physician-researched material for use in your practice or hospital will be cheerfully discussed.

Merck Sharp & Dohme, Philadelphia, Pa. Booth 21.

A new and promising adrenocortical steroid is featured at the Merck Sharp & Dohme booth. Decadron dexamethasone possesses all the basic actions and effects of other glucocorticoids but in different degree. Its anti-inflammatory activity is more potent on a weight basis than any other known glucocorticoid. Electrolyte imbalance is not ordinarily a therapeutic problem. Diuril—a diuretic compound that possesses favorable biologic properties common to both the mercurial preparations and the carbonic anhydrase inhibitors—is also of interest. Following a single oral dose, Diuril produces effects within two hours which last for 6 to 12 hours. It is repeatedly effective when administered continuously once or twice daily for a long period. Technically trained personnel are present to discuss these and other subjects of clinical interest.

Eisele & Company, Nashville, Tenn. Booth 22.

Eisele & Company is happy to display at the Missouri State Medical Association meeting their regular line of Hypodermic Syringes both the Regular and Interchangeable types. Eisele & Company also displays their line of Hypodermic Needles, Clinical Thermometers, Eco Bandage and specialty Glasswears.

W. B. Saunders Company, Philadelphia, Pa. Booth 23.

New Saunders titles of special interest to the clinical physician include: Cecil & Loeb: Textbook of Medicine; Nelson: Pediatrics, Current Therapy 1959; Lewis: Dermatology; Wohl: Long-Term Illness; DePalma: Fracture Atlas, and Roberts: Difficult Diagnosis.

Naico Electronics, Inc., Minneapolis, Minn. Booth 24.

Wm. P. Poythress & Co., Richmond, Va. Booth 25.

A cordial welcome awaits you at the Poythress booth (No. 25). Solfoserpine, new distinctive combination of reserpine, phenobarbital and colloidal sulfur; Mudrane, outstanding anti-asthmatic tablet; Solfoton; and other well-established Poythress products are featured. We will be grateful for your requests for literature and trial supplies.

G. D. Searles & Co. Ill. Booth 28.

You are cordially invited to visit the Searle Booth where our representatives will be happy to answer any questions regarding Searle Products of Research. Featured are Dartal, the new tranquilizing agent which controls activities associated with anxiety states and other neuroses; Enovid, the new synthetic steroid for treatment of various menstrual disorders; Zanchol, a new biliary abstergent; Nilevar, the new anabolic agent, and Rolicton, a new safe, nonmercurial oral diuretic. Also featured are Vallestril, the new synthetic estrogen with extremely low incidence of side reactions; Pro-Banthine and Pro-Banthine with Dartal, the standards in anti-cholinergic therapy; and Dramamine and Dramamine-D, for the prevention and treatment of motion sickness and other nauseas.

Sanborn Company, Waltham, Mass. Booth 29.

Smith, Kline & French Laboratories, Philadelphia, Pa. Booth 30.

S.K.F. features (1) Temaril® Tablets and Syrup, the oral medication specifically for the relief of itching, both mild and severe; (2) Vi-Sorbin®, the potent modern tonic that contains B_{12}, B_6, iron and folic acid, and incorporates the Absorption Enhancement Factor, D-Sorbitol; and (3) Compazine®, the tranquilizer and antiemetic with minimal side effects.

Marion Laboratories, Inc., Kansas City, Mo. Booth 31.

Marion's new hematinic tablets, Anasorb and Fumasorb, are displayed. They both contain Ferrous Fumerate (a well tolerated, well absorbed iron) and d-Sorbitol, an iron absorption enhancement factor. Each member and guest of the Missouri State Medical Association is cordially invited to visit the Marion booth, receive a friendly smile, a sincere "Welcome, Doctor," and a brief discussion of our new products.

Holland-Rantos, Inc., New York, N. Y. Booth 32.

You are invited to discuss with Holland-Rantos representatives: Mechanical advantages of contouring Koro-flex Diaphragms; new, improved Nylmerate Jelly & Solution for vaginal leukorrheas; special Koromex a for use where "jelly alone" is indicated; beneficial cutaneous effects of Hollandex Ointment (with Silicones and natural vitamins A & D) upon contact—and neurodermatitis, decubitus ulcers, diaper rash, skin dryness.

Milex Professional Specialties, Peoria, Ill. Booth 33.

Milex Products display a complete line of Gynesic Specialties—including the Milex Plastic Folding Pessaries—Trichosan—Crescent and our Marital Guide. In addition we invite your inspection of our Uterine Cancer Detection instruments and a new device for Cold Coning of the cervix—combined with coagulation and suction.

Lederle Laboratories, Pearl River, N. Y. Booth 34.

You are cordially invited to visit the Lederle Booth where our Medical Representatives are in attendance to provide the latest information and literature available on our line. Featured are Achromycin V, Aristocort, and many other of our dependable quality products.

Abbott Laboratories, North Chicago, Ill. Booth 35.

The exhibit features the Abbott Laboratories Antibiotic Triad—three products which together provide control of all coccal infections: Erythrocin® Stearate, Compocillin®-VK and Spontin®. Also shown are Abbott's unique new "metered release dose form" products, Tral Gradumets® and Desoxyn Gradumets®, plus a selection of other Abbott specialties.

A. S. Aloe Company of Kansas City, Kansas City, Mo. Booth 36.

Ciba Pharmaceutical Products, Inc., Summit, N. J. Booth 37.

The Ciba exhibit features Singoserp, a new synthetic analog of Reserpine which possesses the favorable cardiovascular effects of the Rauwolfia drugs but at the same time it is less sedative. The drug is indicated in most forms of arterial hypertension and pre-eclampsia associated with pregnancy when rapid reduction of blood pressure is not required. Singoserp has a wide margin of safety and an excellent therapeutic index which permits individualization of dosage and keeping side effects at a minimum.

Eli Lilly and Company, Indianapolis, Ind. Booth 38.

You are cordially invited to visit the Lilly exhibit located in space number 38. The Lilly sales people in attendance welcome your questions about Lilly products and recent therapeutic developments.

The S. E. Massengill Company, Kansas City, Mo. Booth 39.

Best wishes from Massengill to the Missouri State Medical Association for a most successful meeting. Massengill service representatives are on hand at the Massengill booth to discuss with you any Massengill product in which you are interested. The S. E. Massengill Company and its service representatives would like to cooperate, in any way possible, to make your meeting a complete success.

The Dietene Company, Minneapolis, Minn. Booth 40.

Have you tasted Meritene . . . the whole protein supplement that does taste good? Visit our booth, enjoy a Meritene Milk Shake with its multiple nutritive values. While you're there, review the Dietene Diet based on Dietene Reducing Supplement. It provides the rare combination of low calories (1000) with high intake of protein and all essential vitamins and minerals in an interesting, effective, Safe weight reducing diet.

Doho Chemical Corporation, New York, N. Y. Booth 41.

Doho Chemical Corporation is pleased to exhibit: Turgasept—ionic deodorizer aerosol spray, neurtalizes odor immediately without floral masking or substituting a new odor. It is highly bactericidal and fungicidal and was primarily formulated for use in hospitals, nursing homes and animal clinics; however, can be used in any type malodor condition.

George A. Breon & Company, New York, Booth 42.

U. S. Vitamin Corporation, New York, N. Y. Booth 43.

On display . . . new 3-dimensional Bivan supplies biologically active whole water-soluble citrus bioflavonoid complex (as provided in C.V.P.) with multiple vitamins and minerals. Extends prophylaxis beyond usual dietary supplements in pregnancy and lactation, in medical, surgical and gynecologic practice, in geriatrics.

King Merritt & Company, Jefferson City, Mo. Booth 44.

Electronic Business Equipment, Inc., Kansas City, Mo. Booth 45.

William H. Rorer, Inc., Philadelphia, Pa. Booth 46.

Maalox, the non-constipating, pleasant tasting antacid and the new double strength tablet Maalox No. 2 are featured. Other product highlights are Fermalox, the new buffered iron tablet, Fermatin, a new dynamic tonic in a capsule for under-par patients, and Ascriptin, a rapid-acting professional salicylate. Our representatives are on hand to answer questions about these and other Rorer products.

C. V. Mosby Company, St. Louis, Mo. Booth 47.

New knowledge, new ideas, new research and technic—all are waiting for you in the newest Mosby books for 1958 and 1959. Come in. Look over these books at your leisure and convenience. If you wish his assistance, our experienced representative will be happy to discuss any book with you.

THE MISSOURI SOCIETY OF MEDICAL TECHNOLOGISTS

Twelfth Annual Convention

Kansas City, Missouri

April 5, 6, 7, 8, 1959

Sunday, April 5, 1959

10:00 a.m. Board of Directors Meeting, Trinity Lutheran Hospital, 31st and Wyandotte, South Entrance Laboratory Reception Room (4th floor).

1:30 p.m. Registration, Trinity Lutheran Hospital, North Entrance (1st floor).

2:00 p.m. Business Meeting, Trinity Lutheran Hospital, North Entrance (1st floor).

5:30 p.m. Post Board of Directors Meeting following.

6:45 p.m. Buffet Supper, Trinity Lutheran Hospital Dining Room.

SCIENTIFIC SESSION

Muehlebach Towers

Rooms 471-473

Monday, April 6, 1959

9:00 a.m. Invocation, Reverend Rodney Crewse, M.A., Ph.L., Chaplain, St. Mary's Hospital, Kansas City.

9:05 a.m. Blood Bank Panel Discussion.
Moderator: Perry Morgan, Ph.D., Director, Community Blood Bank of the Kansas City Area, Inc., Associate Clinical Professor, Department of Medical Microbiology, University of Kansas School of Medicine.
Panel: James J. Griffitts, M.D., President, Dade Reagents, Inc.; Assistant Director, John Elliott Blood Bank, Miami, Florida.
Eugene F. Tucker, M.D., Associate Professor of Pathology, St. Louis University School of Medicine, Director of Laboratories, St. Mary's Hospital, St. Louis.
Bernice Koster, B.S., MT(ASCP), B.B., Chief Technologist, Blood Bank, Barnes Hospital, St. Louis.
Ruth Neseth, A.B., MT(ASCP), B.B., Chief Technologist, Blood Bank, General Hospital, Kansas City.
Beverly Fiorella, B.S., MT(ASCP), B.B., Chief of Blood Bank and Bacteriology, St. Mary's Hospital, Kansas City.
Eloise Walker, A.B., MT(ASCP), B.B., Community Blood Bank of the Kansas City Area, Inc.

2:00 p.m. The Nature and Effect of "Immune" Anti-A and Anti-B, James J. Griffitts, M.D., President, Dade Reagents, Inc., Assistant Director, John Elliott Blood Bank, Miami, Florida.

2:30 p.m. Cross-Matching Difficulties, Perry Morgan, Ph.D., Director of Community Blood Bank of the Kansas City Area, Inc.

3:15 p.m. Extra Corporeal Circulation: Its Use and Problems Associated With It, Nirmal Kumar Mitra, M.D., Diplomat, American Board of Pediatrics, Clinical Director of the Memorial Diagnostic Heart Service Association, Kansas City.

Tuesday, April 7, 1959

9:00 a.m. Laboratory Studies in Hemorrhagic Diseases, Gustave Eisemann, M.D., Kansas City.

9:30 a.m. Cyanmethemoglobin Certification Program, Victor B. Buhler, M.D., Pathologist, St. Joseph's Hospital, Kansas City.

10:15 a.m. The Changing Role of the Hospital Laboratory in Community Health, Abraham Gelperin, M.D., Dr. P.H., M.S.H.A., Director of Health and Hospitals, Kansas City.

10:45 a.m. Serologic Tests for Syphilis Using Treponemal Antigens, Elmer Spurrier, Bureau of Laboratories, Division of Health of Missouri, Jefferson City.

11:15 a.m. Fluorescence Microscopy in the Study and Diagnosis of Infectious Diseases, Chien Liu, M.D., Associate Professor of Pediatrics, University of Kansas School of Medicine, Kansas City, Kansas.

2:30 p.m. Mima-Herella Bacteria, Their Identification and Significance in Clinical Bacteriology, Herbert S. Goldberg, Ph.D., Associate Professor of Microbiology, University of Missouri School of Medicine.

3:15 p.m. Résumé of a Recent Tuberculosis Workshop, J. H. Hill, M.D., Pathologist, Trinity Lutheran Hospital, Kansas City.

3:30 p.m. Special Stains in Histologic Technic, Mrs. Maxine Van Dyke, HT(ASCP), Histologist, St. Mary's Hospital, Kansas City.

Wednesday, April 8, 1959

9:00 a.m. Automatic Titrametric Plasma (Serum) Bicarbonate Determination, Albert L. Chasson, M.D., A.B., B.S. in Medicine, Resident Fellow in Clinical Pathology, University of Kansas School of Medicine.

9:30 a.m. Laboratory Evaluation of Pancreatic Disease, Frank A. Mantz, M.D., Pathologist, St. Joseph's Hospital, Kansas City.

10:00 a.m. Studies of Transaminase in Cerebrospinal Fluid, R. O. Muether, M.D., Associate Professor, St. Louis University School of Medicine, St. Louis.

10:45 a.m. Correlation of Serum and Spinal Fluid Lactic Dehydrogenase, Anne J. Sommer, B.S., MT(ASCP), Chief Medical Technologist, St. Louis County Hospital, St. Louis.

11:15 a.m. Radioisotopes in the Clinical Laboratory, L. F. Moriarty, M.D., Pathologist, St. Margaret's Hospital, Kansas City, Kansas; Associate Pathologist, St. Mary's Hospital, Kansas City, Missouri.

11:45 a.m. Properdin, James M. Handley, M.D., Pathology Resident, St. Mary's Hospital, Kansas City.

ENTERTAINMENT CALENDAR

Sunday, April 5, 1959

6:45 p.m. Buffet Supper, Trinity Lutheran Hospital, 30th and Wyandotte, Kansas City ($2.25).

Monday, April 6, 1959

5:00 p.m. Dinner for Sisters, guests and others, Golden Ox, Frontier Room. (Members are guests of Missouri Society of Clinical Pathologists; non-members and guests, $4.00.)

5:00 p.m. Social Hour, Hotel Muehlebach.

7:00 p.m. Banquet, Golden Ox, Frontier Room. (Members are guests of Missouri Society of Clinical Pathologists; non-members and guests, $4.00.)

Tuesday, April 7, 1959

12:30 p.m. Luncheon, Muehlebach Towers, Room 22 ($2.55).

6:00 p.m. Movie for the Sisters, St. Mary's Hospital, Staff Room.

Deadline for Reservations, March 31, 1959. Make Reservations to: Miss Frances Wolfskill, MT(ASCP), Spring Convention Chairman, Trinity Lutheran Hospital, 31st and Wyandotte, Kansas City 8, Missouri.

UNIQUE VITAMIN SUPPLEMENT

NEW VIGRAN

CHEWABLES

SQUIBB MULTIPLE VITAMIN SOFT TABLETS

fruit-punch flavored tablets that will actually "melt in the mouth"

can be chewed like candy

can be crushed and sprinkled on cereal or other food

can be dissolved in water, juice or milk

can be sucked and will dissolve like a lozenge

can be easily swallowed (small tablet size)

VIGRAN CHEWABLES *taste like candy*, but contain *no ingredients harmful to teeth.* Important, too, is that VIGRAN CHEWABLES *dissolve easily* in the mouth and *smell good.* These advantages will also appeal to your elderly patients. And VIGRAN CHEWABLES provide at least 125% of the minimum daily requirements for vitamins A, D, B_1, B_2, niacinamide and C, and significant amounts of other essential vitamins.

Each VIGRAN CHEWABLE tablet contains:

Vitamin A	5,000 U.S.P. units
Vitamin D	1,000 U.S.P. units
Vitamin C	75 mg.
Vitamin B_1	3 mg.
Vitamin B_2	3 mg.
Vitamin B_6	2 mg.
Niacinamide	25 mg.
Calcium Pantothenate	3 mg.
Vitamin B_{12}	5 mcg.

Available in Rx-size bottles of 30 and 90.

SQUIBB

Squibb Quality—
the Priceless Ingredient

'Vigran'® is a Squibb trademark

FINANCIAL STATEMENT FOR THE YEAR 1958

LENNERTSON & COMPANY
CERTIFIED PUBLIC ACCOUNTANTS

ROBERT A. LENNERTSON, C.P.A.
MEMBER—AMERICAN INSTITUTE OF CERTIFIED PUBLIC ACCOUNTANTS
RICHARD J. LENNERTSON, C.P.A.
ST. LOUIS 5, MISSOURI

February 2, 1959

Missouri State Medical Association,
634 North Grand Boulevard,
St. Louis, Missouri

Gentlemen:

An examination has been made of the books and records of the Missouri State Medical Association for the year 1958 and a report thereon is presented together with the following statements:

Exhibit A	Balance Sheet
Exhibit B	Income Statement
Exhibit C	Statement of Committee and Meeting Expenses
Exhibit D	Dues Receivable and Membership by Counties

It should be noted that members' dues are taken into income on the cash basis; whereas the other accounts are maintained on the accrual basis. Items paid in advance, except members' dues, are shown as prepaid and carried forward to the year to which they apply.

Scope of Examination

The Balance Sheet at December 31, 1958, and the Income Statement for the year ended with that date were reviewed. Examinations or tests were made of the accounting records, in the manner and to the extent deemed appropriate, without making a detailed audit of the transactions.

Cash in banks, as shown by the books, was reconciled with the regular monthly bank statements and confirmations received from the depositaries. The petty cash fund of $25.00 was counted and bonds with a par value of $106,500 were verified by a statement from Mercantile Trust Company, custodian. Bond interest income of $2,729.57 was properly accounted for on the books. Recorded cash receipts for the year were traced in total into the bank accounts as deposits and disbursements for the period were substantiated by an inspection of paid checks, purchase invoices and other data on file. Selective tests were made of the income and expense accounts for the period. It was noted that Journal space was contributed to the United States Treasury Department for bond advertising and to members and widows of members for small classified ads.

Income Statement

The financial result of the activities of the Association for the year 1958 was an excess of income over expenses of $17,698.61 as set forth in Exhibit B. Exhibit C, supporting Exhibit B, presents a summary of committee and meeting expenses for the year.

Balance Sheet

The financial position of the Association at December 31, 1958, is presented in Exhibit A. Additional comments follow on Balance Sheet Accounts.

Accounts Receivable—Advertisers, $9,553.95, represented the unpaid balances due from Advertisers at the year end. Of this amount $9,490.95 was due from the State Journal Advertising Bureau for November and December, 1958.

Unpaid Dues of $1,076.25, offset by a reserve account in like amount, represents 1958 dues of delinquent members carried at December 31, 1958, at the requests of the local societies. Other delinquent members were dropped from membership in accordance with the bylaws. Exhibit D presents a summary of unpaid 1958 dues, prepaid 1959 dues and membership by counties, as shown by the records of the Association.

Furniture and Fixtures continue to be stated in the fixed amount of $1,000. Purchases and repairs during the year in the total of $2,256.91 were charged to expense in lieu of depreciation.

Records and data on file were carefully reviewed for liabilities at December 31, 1958, and it is believed that all current liabilities of substantial amount are included in the Balance Sheet. A contingent liability of $600 is reported in connection with two malpractice suits pending against members. The Association is required to furnish assistance in an amount not to exceed $300 in each case, under the provisions of its bylaws.

Exhibitors have made advance payments of $3,516.25 for 1959 annual session exhibit space and these payments will be taken into income when earned in 1959.

General

Insurance policies were inspected and the following insurance was in force at the close of the year:

Insurance on	*Type of Coverage*	*Amount*
Furniture and Fixtures	Fire and Extended Coverage (80 per cent co-ins.)	$4,000
Employees	Workmen's Compensation	Statutory
Lessee's Liability	Bodily Injury	$25,000/50,000
Treasurer	Fidelity Bond	$20,000
Exployees (except Vice President and Secretary)	Fidelity Bond	$5,000
Employees (Executive Secretary, Field Secretary and Business Manager)	Endowment Life Policies with Disability Benefits (Cash Value $22,637.76) 3 policies—coverage each	$12,000
Automobiles of Executive, Field and Assistant Secretaries	Non-ownership—Bodily Injury	$50,000/100,000
	Non-ownership—Property Damage	$5,000

Subject to the comments thereon, the attached statements, in our opinion, present fairly the financial position of the Missouri State Medical Association at December 31, 1958, and the results of its activities for the year then ended, in accordance with accepted principles of accounting applied on a basis consistent with that of the preceding year.

Yours very truly,
Lennertson & Company,
Certified Public Accountants.

Missouri State Medical Association
Balance Sheet, December 31, 1958

Exhibit A

Assets		
Cash		
Mercantile Trust Company (Treasurer's Account)	$ 39,481.95	
Mercantile-Commerce National Bank (Secretary's Account)	538.14	
Petty Cash Fund	25.00	$ 40,045.09
Investments (Cost)		
U. S. G. Bonds $10,000 2½% Due 1959	$ 10,000.00	
U. S. K. Bonds $5,000 2.76% Due 1967	5,000.00	
U. S. Treasury $41,500 2½% Due 1967-71	39,926.71	
U. S. Treasury $35,000 4% Due 1961 and 1969	35,135.53	
U. S. Treasury $10,000 2⅝% Due 1963	10,000.00	
Pacific Gas & Electric Co. $5,000 4½% Due 1990	5,000.00	105,062.24
Accounts Receivable—Advertisers	$ 9,553.95	
Mercantile Trust Co. Investment Custodian	492.49	10,046.44
Dues Receivable—Exhibit D		1,076.25
Furniture and Fixtures (at stated value)		1,000.00
Advances for Travel Expense		50.17
		$157,280.19
Liabilities		
Accounts Payable		
Supplies and Expenses	$ 5,308.85	
Payroll Taxes	333.09	$ 5,641.94
Dues Collected for American Medical Association		200.00
Deferred Credit to Income		
Advance Payments by Exhibitors		3,516.25
Contingent Liability to Members on Two Malpractice Suits	$ 600.00	
Reserve for Uncollected Dues		1,076.25
Reserve for Future Activities		
Balance January 1, 1958	$129,147.14	
Excess of Income Over Expenses for the Year 1958 (Exhibit B)	17,698.61	146,845.75
		$157,280.19

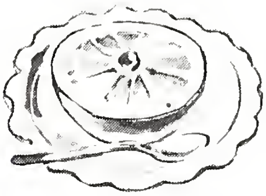
Lamb Chops

Celery and Radishes

Hamburgers

Lemons

Vinegar

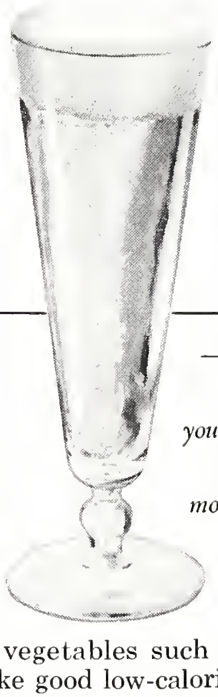


Grapefruit

Spices and Herbs

Fresh Vegetables

A few suggestions on how to give your patient a diet he can "stick to"—



—and a glass of beer, at your discretion, for a morale-booster

The Low Calorie Diet

A diet that calls for lamb chops when they aren't on the restaurant menu is an invitation to "slip off." But a diet outline that lets your patient fill in the details provides incentive to stick to his diet.

He must remember that a candy bar equals a hamburger in calories only. An alternative must be equivalent in nutrition, too.

Fresh fruits or vegetables such as celery and radishes make good low-calorie nibbles. Spices and herbs, lemon and vinegar add zest with few or no calories.

Have your patient keep a calorie count. Then with a glass of beer* to brighten meals, he is more likely to follow a balanced diet later.

*104 Calories/8 oz. glass (Average of American Beers)

United States Brewers Foundation
Beer—America's Beverage of Moderation

If you'd like reprints of 12 special diets, please write United States Brewers Foundation, 535 Fifth Avenue, New York 17, N. Y.

EXHIBIT B

Missouri State Medical Association
Income Statement for the Year 1958

Particulars	*General Activities*	JOURNAL *Publication*	*Total*
Income			
Dues Received ($1.00 per member annually for The JOURNAL)	$107,052.00	$ 3,328.00	$110,380.00
Rentals—Annual Session Exhibit Space	8,745.00		8,745.00
Subscriptions to The JOURNAL—Nonmembers		262.00	262.00
Advertising Space—The JOURNAL		58,553.72	58,553.72
Interest on Investments	2,729.57		2,729.57
Collection Fees on A.M.A. Dues	740.75		740.75
Rental Income—Office Space	540.00		540.00
Other Income	225.00		225.00
Total Income	$120,032.32	$62,143.72	$182,176.04
Expenses			
Salary—Executive Secretary	$ 8,800.00	$ 4,400.00	$ 13,200.00
Office Salaries	28,191.67	14,095.83	42,287.50
Employees' Retirement Insurance Premiums	2,398.20		2,398.20
Office Rent and Light	4,630.52		4,630.52
Postage	2,778.99	890.37	3,669.36
Stationery, Printing and Office Supplies	3,744.65		3,744.65
Directories and Clipping Service	847.21		847.21
The JOURNAL—Paper, Printing, etc.		40,308.43	40,308.43
Cash Discount to Advertisers		213.48	213.48
Commissions on JOURNAL Advertising		5,725.31	5,725.31
Telephone and Telegraph	2,513.52		2,513.52
Insurance—General	287.90		287.90
Professional Fees	2,650.00		2,650.00
Taxes—Payroll and Personal Property	1,591.82		1,591.82
Traveling Expense—Executive Secretary	960.70		960.70
Traveling Expense—Field Secretary	2,553.59		2,553.59
Traveling Expense—Assistant Secretary	2,321.97		2,321.97
Committee and Meeting Expenses (Exhibit C)	31,219.21		31,219.21
Equipment Purchases and Repairs in lieu of Depreciation	2,256.91		2,256.91
General Expenses	725.60		725.60
Bond Custodian Fees	146.55		146.55
Student Awards	225.00		225.00
Total Expenses	$ 98,844.01	$65,633.42	$164,477.43
Net Income or (Loss) for the Period	$ 21,188.31	$(3,489.70)	$ 17,698.61

EXHIBIT C

Missouri State Medical Association
Statement of Committee and Meeting Expenses
For the Year 1958

Annual Session		$ 9,967.26
Council Meetings and Councilors' Expenses		6,880.45
Delegates to A.M.A.		2,907.52
Public Relations		7,809.04
Woman's Auxiliary		1,319.01
Committees:		
American Medical Education Foundation	$ 53.10	
Cardiac Disease	73.75	
Civil Defense	126.19	
Hospital and Professional Relations	266.07	
Infant Care	66.24	
Maternal Welfare	36.04	
Medical Economics	63.88	
Medical Education and Hospitals	34.37	
Public Policy and Relations	740.94	
Publications	133.18	
Rural Medicine	83.06	
Scientific and Postgraduate Work	537.51	
Tuberculosis	63.44	
Venereal Disease	58.16	2,335.93
Total		$31,219.21

EXHIBIT D

Missouri State Medical Association
Dues Receivable and Membership by Counties
December 31, 1958

	MEMBERSHIP					
Counties	*Active*	*Junior*	*Honor*	*Total*	*Unpaid Dues*	*Prepaid Dues*
Andrew	5		1	6		
Audrain	18		1	19		
Barton-Dade	8	1	1	10		
Benton			2	2		
Boone	72	1	4	77		
Buchanan	73	2	13	88		
Butler-Ripley-Wayne	28	1	1	30	$35.00	
Callaway	11		7	18	35.00	
Cape Girardeau	38	3	9	50	35.00	
Carter-Shannon	1			1		
Chariton-Macon-Monroe-Randolph	23	2	5	30		
Clay	42	15	2	59	17.50	
Clinton	6			6		
Cole	38	2	4	44		
Cooper	11		2	13		
Dallas-Hickory-Polk	6		1	7		
Dunklin	21	2	4	27	105.00	
Franklin-Gasconade-Warren	23			23		
Grand River	42	4	6	52		
Greene	136		10	146	70.00	
Henry	9	2	1	12		
Howard	7			7		
Jackson	598	36	116	750	87.50	
Jasper	64		12	76		
Jefferson	18			18		
Johnson	9	1	1	11		
Lafayette-Ray	21	3	2	26		
Lewis-Clark-Scotland	3		1	4		
Lincoln-St. Charles	23	1	1	25		
Marion-Ralls-Shelby	27		4	31		
Mid-Missouri	35		1	36		
Miller	3			3		
Mineral Area	26		1	27		
Moniteau	5			5		
Montgomery	3		1	4		
Morgan	4		1	5		
Nodaway-Holt-Atchison-Gentry-Worth	18	1	3	22		
North Central	9		7	16		
Ozarks	41	5	8	54		
Pemiscot	18	10	2	30	70.00	
Perry	10	1	2	13		
Pettis	26		5	31		
Pike	7	3	2	12	17.50	
Platte	5	1		6	70.00	
St. Louis City	1,015	141	119	1,275	332.50	
St. Louis County	371	8	34	413	105.00	$35.00
Saline	17	1	3	21		
Semo	29	4	6	39	8.75	
South Central	15	4	5	24	52.50	
Webster	2		1	3		
West Central	31	2	11	44	35.00	
Totals	3,071	257	423	3,751	$1,076.25 A	$35.00

(A) Delinquent dues of members at December 31, 1958 carried at the requests of local societies.

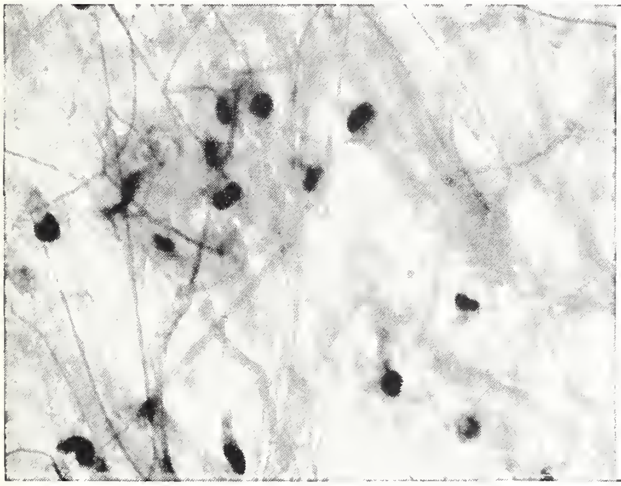
Budget for 1959

Salaries	$ 57,900.00
Office Rent	4,700.00
Postage	6,000.00
Printing, Stationery, Office Supplies	5,000.00
JOURNAL Expense, Printing and Paper	45,000.00
Telephone and Telegraph	2,500.00
Employment Insurance and Retirement Plans	6,500.00
Professional Fees	4,000.00
Taxes Payroll	1,700.00
Travel Expense	7,000.00
Committees	39,975.00
Furniture and Fixtures	1,200.00
General Expense	3,000.00
Total	$181,475.00

ogesic*

Steroid—Analgesic Compound LEDERLE

for relief of *chronic*—but *less severe* pain of rheumatic origin



Indications: Mild cases of rheumatoid arthritis, tenosynovitis, synovitis, bursitis, mild spondylitis, myositis, fibrositis, neuritis and certain muscular strains.

Dosage: Average initial dosage: 2 capsules 3 or 4 times daily. Maintenance dosage to be adjusted according to response.

Each Aristogesic Capsule contains:

ARISTOCORT® Triamcinolone	0.5 mg.
Salicylamide	325 mg.
Aluminum Hydroxide . .	75 mg.
Ascorbic Acid	20 mg.

Supply: Bottles of 100.

Collagen tissue (x250)

*TRADEMARK

Lederle

LEDERLE LABORATORIES, A Division of AMERICAN CYANAMID COMPANY, Pearl River, New York

MISSOURI CHAPTER, AMERICAN COLLEGE OF CHEST PHYSICIANS

Missouri Trudeau Society, Combined Meeting

Hotel Phillips, Kansas City

Sunday, April 5, 1959

11:30 a.m. Business meetings.
12:00 noon Luncheon meeting.
1:00 p.m. Scientific Program.

An Analysis of the Prognostic Significance of the Roentgen Manifestations of Lung Cancer, Theodore E. Keats, M.D., Columbia.

Prevention and Definitive Treatment of Cor Pulmonale, Kenneth C. Price, M.D., St. Louis.

Newly Recognized Viruses in Acute Respiratory Diseases, Tom D. Y. Chin, M.D., Washington, D. C.

Coffee Break

Recent Experience With Aortic Prosthesis, Hector Benoit, M.D., Kansas City.

Histoplasmosis: A Review of Recent Developments, Henry C. Sweany, M.D., Mount Vernon.

Social Hour.

NEW MEMBERS

Bascom, Charles H., M.D., Woodson Bldg., St. Joseph. Buchanan County Medical Society.

Belinson, Louis, M.D., Division of Mental Health, Jefferson City. Cole County Medical Society.

Boch, Lysle M., M.D., 1737 Harrison Hill, Hannibal. Marion-Ralls-Shelby County Medical Society.

Brukardt, Diane, M.D., 901 Mikel St., Columbia. Boone County Medical Society.

Dolezal, Joseph B., M.D., Bryant Bldg., Kansas City. Jackson County Medical Society.

Fogarty, Edward R., M.D., Kirkpatrick Bldg., St. Joseph. Buchanan County Medical Society.

Fulton, Albert E., M.D., 2625 W. Paseo, Kansas City. Jackson County Medical Society.

Gonzalez, Mario Garza, M.D., 122 Market St., Warrensburg. Johnson County Medical Society.

Guperin, Abraham, M.D., City Hall Bldg., Kansas City. Jackson County Medical Society.

McIntyre, A. N., M.D., Clinton General Hospital, Clinton. Henry County Medical Society.

McKee, Wallace P., M.D., Plaza Medical Bldg., Kansas City. Jackson County Medical Society.

Mohs, Frank L., M.D., 12 Paris Court, Columbia. Boone County Medical Society.

Moranville, Benedict, M.D., 311 Alexander Drive, Columbia. Boone County Medical Society.

Payne, John W., M.D., Professional Bldg., Columbia. Boone County Medical Society.

Pingelton, William B., M.D., 1006 Cherry St., Columbia. Boone County Medical Society.

Pruett, Paul L., M.D., Professional Bldg., Springfield. Greene County Medical Society.

Rapp, Earl L., M.D., 1001 Broadway, Hannibal. Marion-Ralls-Shelby County Medical Society.

Ray, Clarence T., M.D., Department of Medicine, University of Missouri, Columbia. Boone County Medical Society.

Richardson, George A., M.D., Union. Franklin-Gasconade-Warren County Medical Society.

Smith, Harvey R., M.D., Burge Hospital, Springfield, Greene County Medical Society.

Wade, William H., M.D., University of Missouri Hospital, Columbia. Boone County Medical Society.

DEATHS

Fritschel, Godfrey C., M.D., St. Louis, a graduate of the State University of Iowa Medical Department, 1902; member of St. Louis Medical Society; aged 78; died September, 1958.

Swartz, George K., M.D., St. Louis, a graduate of the University of Pennsylvania School of Medicine, 1924; member of St. Louis Medical Society; aged 61; died December 20.

Edwards, Thomas B., M.D., Cedar Hill, a graduate of Missouri College of Medicine and Science, 1909; member of Jefferson County Medical Society; aged 84; died December ?

Kitchell, William E., M.D., St. Clair, a graduate of American Medical Missionary College, 1903; member of Franklin-Gasconade-Warren County Medical Society; aged 80; died December 20.

Mansbacher, Kurt, M.D., St. Louis, a graduate of University of Heidelberg, 1919; member of St. Louis Medical Society; aged 63; died December 21.

Evans, Albert L., M.D., Bonne Terre, a graduate of Barnes Medical College, 1900; member of Mineral Area County Medical Society; aged 87; died December 30.

Baskett, Edgar D., M.D., St. Petersburg, Florida, a graduate of Johns Hopkins School of Medicine, 1919; member of Boone County Medical Society; aged 67; died January 1.

Howard, Walter M., M.D., Joplin, a graduate of Washington University Medical School, 1930; member of Jasper County Medical Society; aged 53; died January 6.

Chilton, James C., M.D., Hannibal, a graduate of Beaumont Hospital Medical College, 1891; member of Marion-Ralls-Shelby Medical Society; aged 92; died January 11.

for depression

▲Deprol▲†

Clinically confirmed in over 2,500 documented case histories[1,2]

CONFIRMED EFFICACY

Deprol
- ► acts promptly to control depression *without* stimulation
- ► restores natural sleep
- ▷ reduces depressive rumination and crying

DOCUMENTED SAFETY

Deprol is unlike amine-oxidase inhibitors
- ► does not adversely affect blood pressure or sexual function
- ► causes no excessive elation
- ► produces no liver toxicity
- ► does not interfere with other drug therapies

Deprol is unlike central nervous stimulants
- ► does not cause insomnia
- ► produces no amphetamine-like jitteriness
- ► does not depress appetite
- ► has no depression-producing aftereffects
- ► can be used freely in hypertension and in unstable personalities

Dosage: Usual starting dose is 1 tablet q.i.d. When necessary, this dose may be gradually increased up to 3 tablets q.i.d.

Composition: Each tablet contains 400 mg. meprobamate and 1 mg. 2-diethylaminoethyl benzilate hydrochloride (benactyzine HCl).

Supplied: Bottles of 50 scored tablets.

[1] Alexander, L.: Chemotherapy of depression—Use of meprobamate combined with benactyzine (2-diethylaminoethyl benzilate) hydrochloride. J.A.M.A. **166**:1019, March 1, 1958. [2] Current personal communications; in the files of Wallace Laboratories.

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Missouri Medicine in Review

Leo H. Pollock, M.D.

FORTY YEARS AGO

A site for the Callaway County hospital has been selected by the board of trustees at Fulton. The county recently voted to issue $75,000 worth of bonds for the erection of a county hospital.

Leo H. Pollock, M.D.

Lieut. Col. John M. Binnie is on his way home from France and expected to arrive March 1. Colonel Binnie was in charge of the Base Hospital Unit 28 when he was sent overseas, but was later made chief consulting surgeon of the Third Army Corps and afterward appointed chief consulting surgeon for all the base hospitals at Limoges.

The training school for nurses at the State Hospital No. 4 has proved successful according to reports from the superintendent.

Dr. W. J. Ferguson of Sedalia has been reappointed a member of the State Board of Health in the place of Dr. A. W. McAlester. Dr. Ferguson was president of the State Board of Health when he accepted a commission in the Army, and Dr. McAlester was appointed to fill the vacancy thus created. On the return of Dr. Ferguson, Dr. McAlester resigned and requested that Dr. Ferguson be reappointed to his old position.

The town of Belleview, Mo., is in need of a physician. Belleview is in Iron County, eighty miles southeast of St. Louis, and five miles off the Iron Mountain Railroad.

An epidemic of influenza began at the Jefferson Barracks on September 28. For the previous two weeks a few cases had been seen which were recognized as probable influenza cases with unusual types of pneumonia. There were 8,935 men in camp. Of these 2,054 were in the hospital up to November 12. There were 368 cases of pneumonia, 120 deaths, all from pneumonia. The mortality among all the men in camp was 1.3 per cent; that of all taken ill, 5.8 per cent, and among the pneumonia cases 32.7 per cent.

On October 1, the first case of influenza, a nurse, was admitted at Barnes Hospital. Since that time about 350 cases have been treated.

The Clay County Medical Society met at the Snapp Hotel in Excelsior Springs, February 24, with an excellent attendance. The society is paying the dues of all men overseas, and at this meeting decided to pay dues of those who may be unpaid on May 25, by reason of protracted service in army cantonments. As the evening was very stormy, many guests of the Snapp Hotel sat in with us and joined in the applause.

TWENTY-FIVE YEARS AGO

Dr. E. A. Doisy, St. Louis, was the guest of the American Chemical Society at Kansas City, February 14, and spoke on "The Internal Secretion of the Ovaries."

The Menorah Hospital, Kansas City, recently received a gift of $25,000 from Mr. Edgar L. Berkley. The gift was made in memory of the donor's parents, Mrs. Nana Berkley and Mr. Maurice Berkley, one of the founders of the institution.

Dr. Max C. Starkloff, St. Louis, was the guest of honor of the St. Louis Medical Society at a meeting and reception at the Society's building January 27. Dr. A. T. McCormack, Louisville, public health officer of the State of Kentucky, and the Honorable Henry Kiel, former mayor of St. Louis, paid high tribute to Dr. Starkloff who for thirty-seven years was health commissioner of St. Louis.

The Boone County Medical Society met in McAlester Hall at 7:45 p.m. on February 6, having as its guests representatives from the county medical societies adjacent to Boone County, members of the nursing staffs from the Boone County and the University hospitals, the entire second year medical class from the University of Missouri, and Dr. J. A. Warner, St. Louis, who was the speaker. Dr. A. R. McComas, Sturgeon, president, presided.

TEN YEARS AGO

C. E. Hyndman, M.D., St. Louis, was installed as president of the St. Louis Surgical Society at the annual meeting of the society on January 19.

R. Lee Cooper, M.D., Warrensburg, spoke on "Socialized Medicine" at a meeting of the Lions Club in Warrensburg in December.

A. E. Spelman, M.D., Smithville, was guest speaker at a meeting of the Rotary Club of Lathrop in December, and spoke on Blue Cross and Blue Shield Plans.

H. R. McCarroll, M.D., St. Louis, was elected treasurer of the American Academy of Orthopedic Surgeons at a recent annual meeting of the academy in Chicago.

The South Central Counties Medical Society met for dinner at the Antlers Cafe in Mountain Grove on January 21 with the following present: Drs. J. A. Fuson, Mansfield; R. A. Ryan, H. G. Frame, R. W. Denney and A. C. Ames, Mountain Grove; Garrett Hogg, Cabool; T. J. Burns, Houston; E. C. Bohrer, West Plains, and John S. Skinner, St. Louis.

From the Medical Schools

WASHINGTON UNIVERSITY

Lectures

The second annual Philip A. Shaffer lecture was sponsored by Washington University School of Medicine on January 14 in the David P. Wohl, Jr. Memorial Hospital Auditorium. Lecturer was Dr. Edward A. Doisy, Sr., distinguished service professor of biochemistry and director of the E. A. Doisy Department of Biochemistry at St. Louis University School of Medicine. Dr. Doisy discussed "Metabolism of Bile Acids." He, together with Dr. Edgar Allen, carried out the basic work identifying the ovarian hormone mainly responsible for the reproductive cycle in female mammals, and later purified the previously crude ovarian extracts so that the chemical formula for the hormone could be determined. At a still later time his discoveries on the nature of vitamin K, a factor important in blood clotting led to the award of the Nobel prize in physiology and medicine in 1943. The lecture honoring Dr. Shaffer was established by his associates and friends in recognition of his more than 45 years of service to Washington University School of Medicine. Dr. Shaffer, who is 78, joined the medical school staff in 1910 as professor of biochemistry. He served as dean of the school from 1915 to 1919 and again from 1937 to 1946. During World War I he was a major in the United States Army Sanitary Corps, in charge of food inspection in France. In 1946, Dr. Shaffer was the first to receive the title "distinguished service professor" from the university. He was appointed to his present position as distinguished service professor emeritus and lecturer in biological chemistry in 1951, and still conducts research in the field of biochemistry. A 1900 graduate of the University of West Virginia, Dr. Shaffer, in 1904, received the first Ph.D. degree in biological chemistry given by Harvard University. He was awarded an honorary doctor of science degree from the University of Rochester in 1939 and from Washington University in 1953. Among his accomplishments in research is a standard test to determine the amount of sugar in blood, which he and Dr. Alexis F. Hartmann, who now is professor and chairman of the department of pediatrics, devised. Without such a test, research dependent on accurate determination of blood sugar was impossible.

Dr. Carl V. Moore, Busch professor and head of the department of medicine at Washington University School of Medicine, delivered the annual Whitehead lecture January 14 at the University of North Carolina School of Medicine, Chapel Hill. The lecture is sponsored annually by the Whitehead Medical Society, a student American Medical Association organization at the North Carolina medical school. Dr. Moore's topic was "The Importance of Immune Mechanisms in the Pathogenesis of Hematologic Disorders."

Dr. Edmund V. Cowdry, research professor emeritus and lecturer in anatomy at Washington University School of Medicine, delivered three lectures in Caracas, Venezuela, during a trip there from Jan. 29 through Feb. 6. As special guest of Dr. J. Quintero, director of the Venezuelan geriatrics program, Dr. Cowdry discussed present knowledge on how cells of the human body age; the future of geriatrics and expectations in the prevention, diagnosis and treatment of cancer.

Washington University Medical Society presented the first of two symposia on the permeability of cells January 28 in the auditorium of David P. Wohl, Jr. Memorial Hospital. Dr. Ernst Helmreich, assistant professor of biochemistry in medicine, spoke on sugar transport in isolated cells; Dr. David Kipnis, assistant professor and Markle scholar in biochemistry in medicine, sugar transport in muscle; and Dr. Robert K. Crane, associate professor of biological chemistry, sugar transport in intestine. Moderator for the symposium was Dr. Carl F. Cori, professor and head of the department of biological chemistry. The March Medical Society meeting will also be devoted to a study of cell permeability.

Visitor

Dr. Marcel C. Bessis, director of the Research Laboratory of the National Blood Transfusion Center for France, was a visitor at Washington University School of Medicine, Jan. 22 through Jan. 24. As guest of Dr. Carl V. Moore, Busch professor and head of the department of medicine, Dr. Bessis visited laboratories in the division of hematology and was shown research being done with the electron microscope in the department of anatomy. He lectured to medical school faculty and students in the David P. Wohl, Jr. Memorial Hospital Auditorium. His subject was "Electron Microscopic Studies on Iron Metabolism." Dr. Bessis is best known for his work in morphologic hematology with the newer morphologic techniques, like phase microscopy and electron microscopy, and is coauthor with Jean Bernard of "Clinical Hematology," a textbook published in Paris.

Grants

Washington University School of Medicine received a $22,244 March of Dimes research grant to be used for continued study of why some nerve cells are destroyed by the virus of polio while neighboring cells are not affected. Investigations are being directed by Dr. Eli Robins, professor of psychiatry, who is beginning his eighth year of

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basic research on the chemistry of the central nervous system. When polio viruses invade the central nervous system, they damage only certain selected groups of cells. Other cells seem to resist the virus attack. Dr. Robins is investigating the chemical differences between susceptible and resistant cells. He is also studying the sequence of chemical action and reaction that takes place when polio virus attacks a susceptible cell and damages or destroys it. The research is providing new knowledge on the various enzymes in nerve cells, how they are involved in cell functions and how they are related to changes in cell activity that take place during an attack by polio virus.

New research and training grants of $153,152 have been awarded Washington University School of Medicine by the United States Public Health Service. Dr. George A. Ulett, professor of psychiatry, was awarded the largest new grant of $37,641 for research to determine if learning processes differ when conditions of extreme emotion arise. The grant will be renewed annually for four years. Coinvestigator is Dr. John S. Stern, associate professor of medical psychology and director of the behavior research laboratory at Malcolm Bliss Hospital, where the research will be conducted. Dr. Jacob O. Sines, research instructor in medical psychology, and associate director of the behavior research laboratory will also assist. Differences between psychiatric patients and control groups will be studied using measures of learning, particularly the conditioned reflex, as tools. A variety of physiologic tests will be made during various kinds of learning tasks and the effects of newer drugs on psychological functions will be studied.

A new grant of $25,325 will provide funds for continuation of a previous five-year study in the department of obstetrics and gynecology to evaluate female sexual responses in basic science terms. Grant funds, to be renewed annually for three years, are under the direction of Dr. William H. Masters, associate professor of obstetrics and gynecology.

Dr. Hiromichi T. Narahara, U. S. Public Health Service special research fellow in biological chemistry, has been awarded $11,500 for research dealing with the specific effect of insulin upon tissues. Both in humans and in experimental animals, the injection of insulin can cause the formation of antibodies that combine with a portion of subsequently injected insulin, preventing it from acting. Antibodies will be produced in experimental animals in an attempt to identify and remove traces of insulin normally present in biologic fluids such as blood plasma.

Dr. Bernard Wortman, research instructor in ophthalmology, was awarded $9,600 for a biochemical study of the cornea of the eye. This grant will be renewed for three years. The interactions of three layers of the cornea, the epithelium, stroma and endothelium, will be investigated to determine what each part contributes to the maintenance and synthesis of the corneal ground substances. The role of the ground substances and the effect of administered hormones and drugs during corneal wound healing will be evaluated.

A $4,908 grant to Dr. A. Duncan Chiquoine, assistant professor of anatomy, will be used to study developing mammalian embryos by electron microscopy. Although new components of cells have become evident since the development of the powerful electron microscope ten years ago, very little is as yet known concerning how differentiated cells such as those of bone and muscle develop from the early, unspecialized and relatively simple cells of the embryo. Dr. Chiquoine's research will follow the changes which occur during the development of the ovum as it grows and divides to form many cells and as these cells become specialized. The study will be made to better understand the functioning of adult cells and to determine some of the causative factors responsible for the formation of many different kinds of cells from the original single-celled ovum.

The two new training grants awarded the medical school were $36,936 to Dr. Gordon M. Schoepfle, associate professor of physiology, for a training program in neurophysiology; and $27,642 to Dr. Edward W. Dempsey, professor and head of the department of anatomy and dean of the medical school, to extend the training of anatomists especially in the field of electron microscopy.

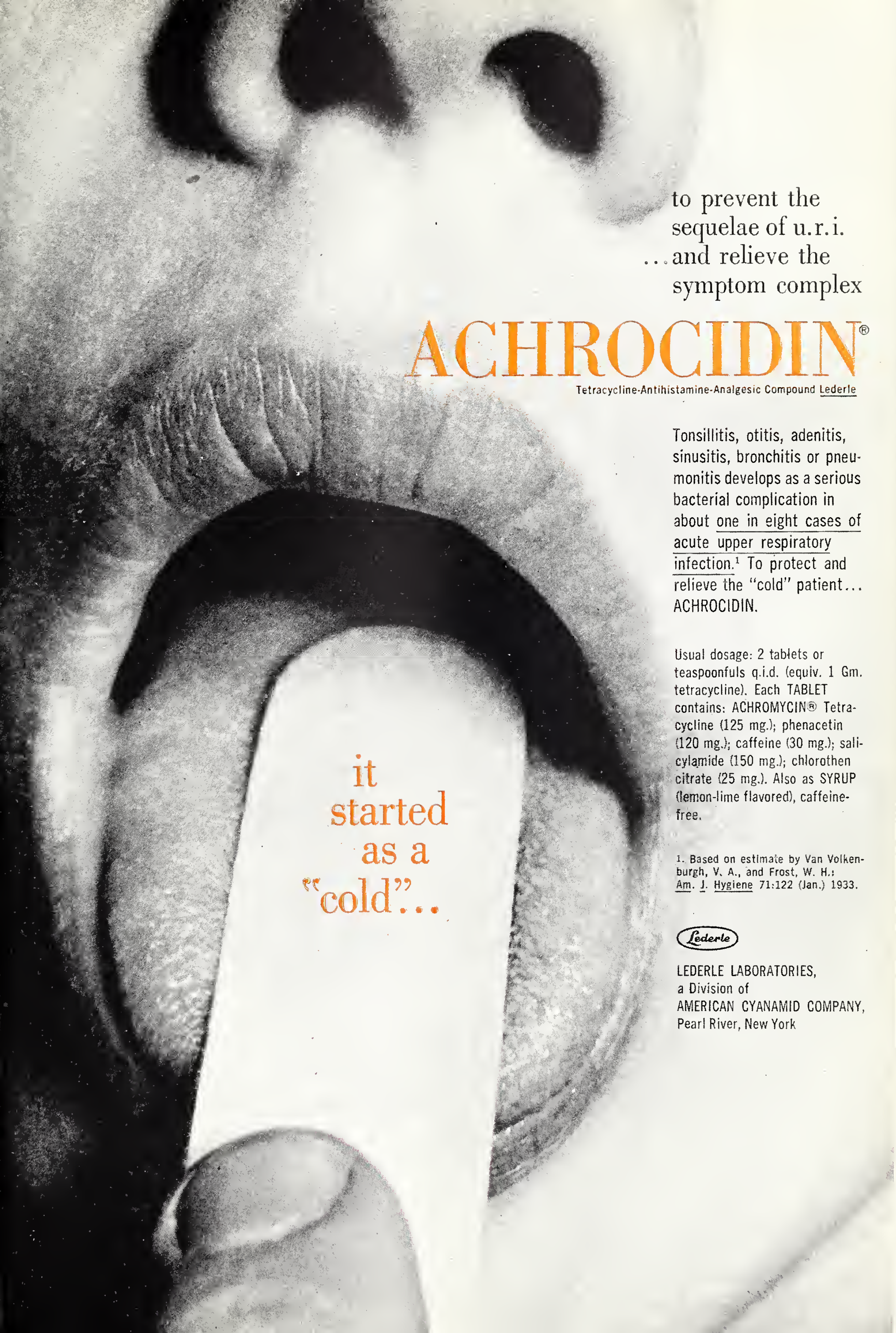
UNIVERSITY OF MISSOURI

Coming Events

The University of Missouri School of Medicine will be visited by Dr. Julius H. Comroe, Jr., professor of physiology and director of the Cardiovascular Institute, University of California Medical School, San Francisco, on March 5, 6, and 7, 1959, who will deliver a lecture on "Contributions of Pulmonary Physiology to Clinical Medicine" as part of the Squibb Centennial Lecture Program. Dr. Comroe is noted for his work in the regulation of respiration of pulmonary function and is author of "Physiological Basis for Oxygen Therapy (1950)" and "The Lung: Clinical Physiology and Pulmonary Function Tests (1955)" as well as papers on carotid and aortic bodies, autonomic drugs, and neuromuscular transmissions.

Meetings Held

The Medical Advisory Committee consisting of physicians from all parts of the state held a meeting at the University of Missouri Medical Center on January 11, at 1:00 p.m. Those attending were: Dr. Joseph Fisher, St. Joseph; Dr. John W. McHaney, Jefferson City; Dr. Virgil E. Jeans, Joplin;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[1] Based on estimate by Van Volkenburgh, V. A., and Frost, W. H.: Am. J. Hygiene 71:122 (Jan.) 1933.

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Dr. Fred B. Kyger, Kansas City; Dr. Walter W. Tillman, Springfield; and Dr. Dennis R. Elrod, Cape Girardeau; Dr. Ralph Perry, Kansas City, President-Elect of the Missouri State Medical Association; Dr. Peter V. Siegel, Smithton, President of the Missouri Academy of General Practice; Dr. Preston C. Hall, St. Louis, President-Elect of the Missouri Academy of General Practice; Dr. Frank Mays, Washington, President of the University of Missouri Medical School Alumni Association; and Dr. H. M. Hardwicke, Jefferson City, Acting Director of the State Division of Health. In addition to these committee members, also present were President Elmer Ellis of the University of Missouri; Dr. E. B. Fred, President Emeritus of the University of Wisconsin; Dr. Roscoe L. Pullen, Dean of the School of Medicine; Dr. Frank B. Engley, Jr., Assistant Dean; and Mr. William T. Chancellor, Business Manager of the University Hospital. This committee acts in an advisory capacity to the administration of the University of Missouri Medical Center and at this meeting discussed the current problems and developments.

On December 28, 1958, a workshop in Basic Spectrophotometry for medical technologists was held at the Medical Center by the following members of the Department of Pathology: Dr. Joseph E. Flynn, professor and chairman of the Department of Pathology; Dr. Vincent P. Perna, assistant professor; Dr. James F. Ransdell, instructor; and Mrs. L'Nora C. Wells and Mrs. Betty N. Wagnon, technologists. The workshop was sponsored by the Missouri Society of Technologists and the Missouri Society of Pathologists.

On January 8, Dr. Samuel P. W. Black, professor of neurosurgery, presented a talk entitled "Harvey Cushing; the Founding of a School," to the Medical History Group. Dr. Black and Mr. William K. Beatty, medical librarian, arranged a display of material concerning Dr. Cushing in the exhibit cases on the main floor of the Medical Sciences Building including a portrait of Dr. Cushing, several photographs of coworkers and students, most of Dr. Cushing's books, and a selection of instruments designed by or for Dr. Cushing.

Trips and Talks

Dr. E. W. Lowrance, professor of anatomy, visited the Department of Anatomy of the University of Kansas, Lawrence, Kansas, and Dr. H. B. Latimer, emeritus professor of anatomy, concerning a manuscript they are preparing on research.

Dr. Stuart O. Landry, Jr., assistant professor of anatomy, attended a symposium on "Vertebrate Zoology" held in Washington, D. C., and sponsored by the American Society of Zoologists and the American Association for the Advancement of Sciences. Dr. Landry presented a paper at this meeting entitled "The position of the milk line and mammary glands in rodents." The secondary purpose of this meeting was to establish an informal association of people interested in comparative anatomy, having an informal newsletter and holding concurrent sessions with the American Society of Zoologists.

Dr. Kenneth L. Fitch, assistant professor of anatomy, visited Washington University School of Medicine in St. Louis on January 8, at which time he had a conference with Dr. E. W. Dempsey, Dean of the School of Medicine and Chairman of the Department of Anatomy, regarding research programs.

Dr. C. Thorpe Ray, professor and chairman of the Department of Medicine, attended a meeting of the San Antonio (Texas) Society of Internists on January 6 in San Antonio and spoke on the subject of "Diuretic Therapy." On January 13, Dr. Ray also spoke on "Diuretic Therapy" before the Jasper County Medical Society in Carthage, Missouri.

On January 13, the Tri-County Medical Society and Academy of General Practice sponsored a Clinical Pathological Conference in Washington, Missouri. Dr. Joseph E. Flynn, professor and chairman of the Department of Pathology, and Dr. Clement E. Brooke, assistant professor of pediatrics, were participants in the CPC.

Dr. Rodman Kabrick, assistant professor of clinical psychology, attended the semi-annual council and business meetings of the Missouri Psychological Association held on December 13 at Washington University, St. Louis. Dr. Kabrick was appointed chairman of the standing committee on psychologists in state and federal organizations.

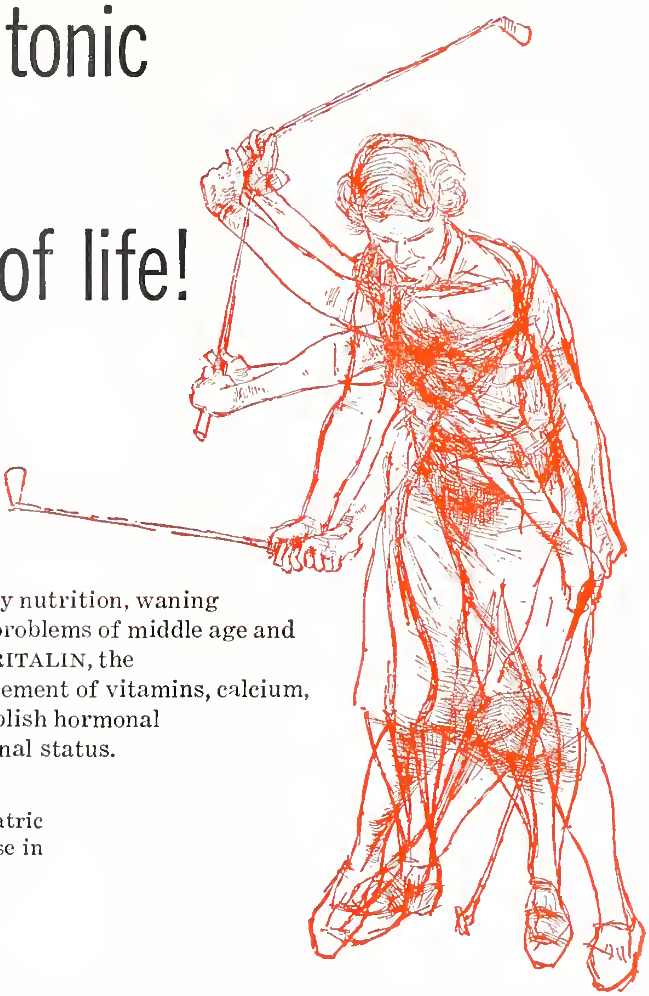
Dr. Hugh E. Stephenson, Jr., professor and chairman of the Department of Surgery, spoke to approximately 100 nurses of the 7th District Nurses Association in the Medical Center on January 8. His topic was "The Nursing Problems Encountered in Patients Undergoing Open Heart Surgery." On January 12, Dr. Stephenson talked to the Cole County Dental Society in Jefferson City on "The Management of Cardiac Emergencies."

Dr. Kenneth K. Keown, Professor of Anesthesiology, talked to the Audrain County Medical Society at the Audrain Hospital in Mexico on January 8 on the subject of "Cardiac Arrest and Its Management."

On December 17, Dr. Carl Lischer, St. Louis, was a guest of the Department of Surgery and was guest speaker and conducted grand rounds.

Gifts and Grants

Dr. J. M. Franz, assistant professor of biochemistry, has been awarded a grant by the U. S. Public Health Service in the amount of $5,812 for the period of February 1, 1959, to January 31, 1960, for the purpose of studies on "Hormonal Control of Tryptophan Peroxidase-Oxidase."



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References: 1. Natenshon, A. L.: J. Am. Geriatrics Soc. *6*:534 (July) 1958.
2. Bachrach, S.: To be published.
RITALIN® hydrochloride (methylphenidate hydrochloride CIBA)

C I B A SUMMIT, N. J.

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New Appointments

Dr. John H. Landor was appointed instructor in surgery effective January 12. Dr. Landor received his M.D. in 1953 from the University of Chicago School of Medicine and before coming to the University of Missouri was instructor in surgery at the University of Chicago.

Dr. John Keith Legan has been appointed assistant instructor in surgery and first year resident effective July 1, 1959. Dr. Legan received his M.D. in 1958 from the University of Missouri and is at present interning at Wayne County General Hospital in Eloise, Michigan.

Dr. Robert E. Stufflebam has been appointed assistant instructor and first year resident in medicine effective July 1, 1959. Dr. Stufflebam received his M.D. in 1958 from the St. Louis University and is at present interning at St. Louis City Hospital.

Dr. Luis R. Diaz was appointed assistant instructor in orthopedic surgery and first year resident effective January 1. Dr. Diaz comes to the University of Missouri from St. Mary's Memorial Hospital, Knoxville, Tennessee, where he was serving a rotating internship.

Preceptorships in General Practice

The first group of fourth year medical students who have elected to serve a preceptorship in general practice have been assigned to the following physicians in the State of Missouri and will serve as preceptees for the period of January 19 to March 1, 1959: Dr. Kenyon Latham, California; Loren H. Hartley, Kansas City; Dr. E. L. Niedermeyer, Tarkio; Herbert McDonald, Iberia; Dr. E. A. Stricker, St. James; John M. Jung, Kansas City; Dr. Frank H. Zahrt, Princeton; William Griffin, Thompson, Missouri.

These physicians who serve as Preceptors are selected by the Committee on Medical Education and Hospitals of the Missouri State Medical Association and if they are willing to serve, are appointed by the Board of Curators of the University of Missouri as preceptors in general practice. The student assigned to them is under their direct supervision for the period of the assignment and will be graded by them for their performance during that period.

Another group of students will be assigned to preceptors for the period of March 2 to April 14, 1959 and others from April 14 through May 27.

SAINT LOUIS UNIVERSITY

Grants

Dr. R. Walter Schlesinger, director of the Department of Microbiology, and Dr. Thomas M. Stevens, instructor in microbiology, have been awarded a new grant of $78,017 by the United States Public Health Service for a five year study into the growth of mosquito transmitted viruses in cultures of insect and mammalian cells.

Other recent U.S.P.H.S. grants awarded to the microbiology department included a grant renewal of $15,468 to Dr. Karl G. Lark, assistant professor of microbiology, for research into antibiotic properties of D-amino acids and the effect of these compounds on cell growth and divisions. A grant renewal of $11,922 for the support of a research fellowship was awarded to Dr. Maurice Green, assistant professor of microbiology.

The National Foundation awarded a $15,414 March of Dimes grant for the continuation of basic research on the part played by protein in the reproduction and growth of viruses. The study is being directed by Dr. Schlesinger and Dr. Norman E. Melechen, assistant professor of microbiology.

Dr. Robert E. Mack, assistant professor of internal medicine and director of the Saint Louis University Medical Service at Veterans Administration Hospital, has been awarded a grant of $16,740 by the United States Public Health Service for the training of physicians in the basic aspects of the use of radioisotopes in clinical medicine. Physicians will receive experience in clinical, diagnostic and therapeutic tests using radioisotope materials. Candidates eligible for the training program will include physicians who have had a part if not all of their postgraduate training.

The Fund for Advancement of Education established by the Ford Foundation has awarded Educational Television Station KETC and Saint Louis University a grant of $58,300 to cover the academic costs for the production of a film series entitled "Principles of Genetics." Leading specialists in the field of heredity will appear on the series of 45 films, to be financed by the McGraw-Hill Company of New York. The films, to be telecast over KETC-TV initially in the spring semester of 1960, will serve as a basis for a regular college credit course in genetics. Dr. John D. Dwyer, director of the Department of Biology, and Dr. Irwin H. Herskowitz, associate professor of biology at Saint Louis University will serve as special consultants in the organization of scientific data for the series of filmed shows. Simultaneous with the initial showing in Saint Louis, the films will be available to colleges, universities, hospitals and industries throughout the world.

Lectures

Dr. James J. Janney, associate professor of clinical medicine, and Dr. James P. Murphy, assistant professor of clinical medicine, spoke before the Ozark County Medical Society January 13 on "Recent Developments in the Treatment of Hypertension."

Dr. Grayson Carroll, associate professor of clinical urology, attended a world medical society con-

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ference held in New York on "The Resistant Organisms and Their Prevention in Treatment." Dr. Carroll presided at the symposium which was attended by representatives from the various parts of the United States, London, Germany, France and Buenos Aires.

Dr. Harold Segal, assistant professor of biochemistry, University of Pittsburgh, delivered a special lecture sponsored by the Department of Pharmacology on the subject of "Some Aspects of Glucose-6-Phosphatase" on January 23.

Dr. C. Rollins Hanlon, director of the Department of Surgery, delivered a paper on "Replacement of Obstructed Arteries" before a meeting of the American Diabetes Association January 23.

Dr. Elizah Adams, director of the Department of Pharmacology, delivered a paper on "Hydroxyproline Metabolism" before the National Institutes of Health in Bethesda, Maryland.

Dr. George Drummond, assistant professor of pharmacology of the British Columbia School of Medicine in Vancouver, visited the pharmacology laboratories recently.

Elections, Honors

Prof. Philip A. Conrath, director of the section of medical illustration, was elected a member of the executive committee of the Association of Medical Illustrators held in Dallas.

Dr. George E. Thoma, director of the radioisotope laboratories, has been named editor of *The Journal of the Society of Nuclear Medicine,* a new publication. It is the first journal in the world devoted entirely to radioisotopes in medicine.

Dr. R. Walter Schlesinger, director of the Department of Microbiology, has been elected associate editor of the *American Journal of Hygiene.*

Dr. LeRoy Sante has been named to receive a gold medal award from the American College of Radiology. Dr. Sante was one of three radiologists throughout the country unanimously chosen for the award by the College's board of chancellors. The award is presented "for distinguished and extraordinary service to the American College of Radiology and to the profession for which it stands."

Seventeen students at the School of Medicine have been elected to membership in the University's Chapter of Alpha Omega Alpha, national honorary medical society. Seniors elected were: Robert Brangle, Francis J. Carey, Anthony W. Czerwinsky, Patrick J. Griffin, Ronald I. Hirohata, Joseph J. Katsuranis, Robert L. Malench, Frank L. McCafferty, Thomas H. Powers, Thomas J. Ridzon, Jess C. Stone and Robert L. Westerheide. Juniors elected were: Max M. Inman, Winfred H. Stringer, Peter J. Tegtmeyer, Paul G. Stromsdorfer and Edward M. Williams. Each year a select number of the senior and junior class is approved for candidacy by the officers of the school and elections are made by the active members of the chapter. Membership is based on scholarship, character and personality.

The objectives of Alpha Omega Alpha are the promotion of scholarship and research in medical schools, the encouragement of a high standard of character and conduct among medical students and graduates and the recognition of high attainment in medical science.

In the Legislature

(Continued from page 242)

Violation of its rules and regulations is a misdemeanor. This was referred to the Committee on.

H.B. 220 provides for incorporation of medical and hospital group plans and for coverage of such act to those plans already otherwise incorporated. Such corporations shall be under the Superintendent of Insurance, who shall issue certificates of incorporation and authority, or refuse to, in cases where he is satisfied a fraud might result, or rates being unreasonable, the capital insufficient, or reserves unreasonable. He shall have the right to inspect association's affairs, books, etc.

The Senate Committee on Public Health and Welfare is composed of the following: Senators A. M. Spradling, Cape Girardeau, chairman; John W. Noble, Kennett; vice chairman; Michael Kinney, St. Louis; Edward J. Hogan, St. Louis; William B. Waters, Liberty; William E. Hilsman, St. Louis; Kelso Journey, Clinton; Robert M. Coleman, Kansas City; James W. Webbe, St. Louis; Noel Cox, Spokane; C. R. Hawkins, Brumley.

The Public Health Committee of the House of Representatives is composed of the following: Representatives Charles H. Pulis, Mexico, chairman; J. F. Baber, Richmond, vice chairman; J. J. Wimp, Kirksville; Fred R. McMahon, Fairfax; Vernon L. Day, Poplar Bluff; Elmo C. Martin, Jackson; Basil V. Jones, Pleasant Hill; G. H. Simmons, Buffalo; Earl S. Cook, Trenton; F. C. Mazzuca, Kansas City; M. E. Bauer, Kansas City; J. M. Neal, Kansas City; H. Keller, Kansas City; Helen Hardy, Belle; Stephan H. Zeilmann, Linn; Luke A. Knese, St. Louis; J. W. Beckerle, St. Louis; Evelyn G. Stone, St. Louis.

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Iron (as Ferric Pyrophosphate)	30 mg.
Sorbitol	3.5 Gm.

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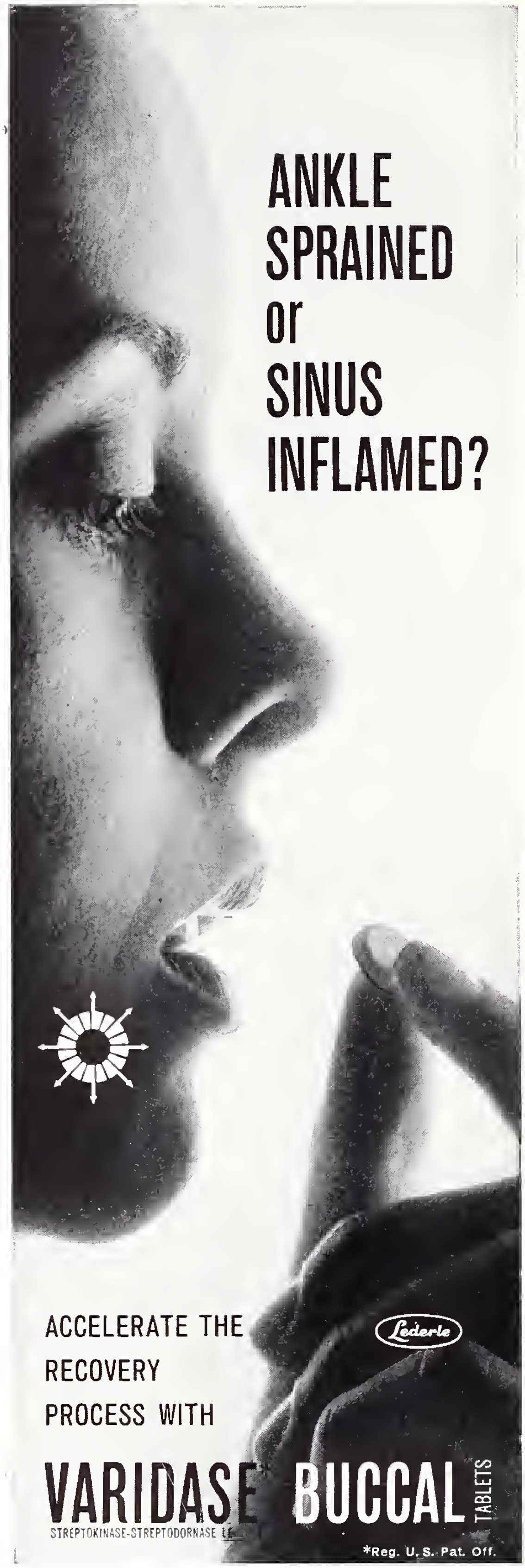

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BOOK REVIEWS

The authors have made a well organized attempt to explain the causes of heart disease as now known. Their claim that any intelligent lay person can understand it is evidently based on the numerous careful repetitions of basic facts.

Their ideal approach to dietary management of heart disease, or its prevention, begins with a blood analysis to determine the lipoprotein content. If one or more of the four classes are elevated appropriate diets to lower such should be initiated. This should be done at least by the age of 30 in attempting to avoid coronary heart disease.

The book contains interesting charts for personal dietary evaluation so one can discover (if the bookkeeping is truthful) how fast he is eating himself into a heart attack. Following this is a "Recommended Diet" to show how it can be changed to ward off the thickening arteries. Also included are many lists of food and drink with their high or low saturated fat content, calories and protein values. The larger portion of the book is devoted to recipes (many of which are quite interesting) substituting low saturated fats for high saturated fats and non-caloric sweeteners for sugar.

In my opinion, the authors assume that the average lay person has more knowledge of physiology and blood chemistry than most of them do. In order for a Physician to recommend the book he would have to know his patient well.

There is one thing definite about the Recommended Diet—it would do none of us any harm and could possibly add several more useful years to our lives. M.E.S.

Love, Skill and Mystery. A Handbook to Marriage. By Theodor Bovet. Doubleday & Company, Inc. New York. 1958. Price $3.50.

Theodore Bovet is a Swiss physician who has become one of Europe's most highly regarded marriage counselors. After reading this book one can readily understand why he is so successful.

Dr. Bovet discusses adequately the practical aspects of marriage. Even more important he presents a view or vision of the wonderful possibilities for spiritual satisfaction, and joy, that marriage can bestow on a couple. The religious aspect of marriage is not dealt with in a separate paragraph, or chapter, as if it was but another facet of marriage. Instead the spiritual reality of marriage permeates the entire discussion. All the practical suggestions are given with the thought of increasing the spiritual harmony within a marriage, for in a good marriage we have a union of the spirits, as well as of the flesh. This union is made a reality through love, and all love comes from God. Therefore God is present in a marriage. This, I believe, is what Dr. Bovet is telling in this book.

An excellent book on marriage, recommended not only for those about to be married, but also to those who are married. R.W.L.

Book Reviews

How to Live With Diabetes. By Henry Dolger, M.D., Chief, Diabetes Clinic, Mt. Sinai Hospital, New York; and Bernard Seeman. W. W. Norton & Company, Inc., New York. 1958. Price $3.50.

As Dr. Dolger said in his foreword, the major emphasis is on the person with diabetes rather than on the ailment or condition. The book is written by a man who writes clearly and smoothly. He neither upgrades or undergrades the layman's intelligence. Although Dr. Dolger has the reputation of being more concerned with the oral treatment than other aspects of diabetes, nevertheless, 30 pages are devoted to the nature of insulin and its use, while the oral drugs are dealt with in 14. The discussion of the handling of young and teenage diabetics, psychologically, is most excellent.

The weakness in this book is in the discussion of diet. The history of dietary points of view is well given but nothing specifically of use to the patient is given. Actual quantitative measurement of food apparently does not enter into Dr. Dolger's treatment of diabetes. Any physician who has difficult problems with diabetic children, or adolescents, need not fear to recommend this book to parents of such children. W.H.O.

Memoirs of a G.P. By Otis Marshall, M.D., Vantage Press, New York, Washington, Chicago and Hollywood. 1958. Price $3.50.

Memoirs of a G.P. is a rambling and not too well written account of a physician's experiences, spanning the time from the horse and saddlebag era to the chemotherapy age.

Dr. Marshall had many busy years as a "Generalist" and in addition spent a number of years associated with the American Red Cross, as chief of a mental hospital and working in clinics. His experiences are similar to those of most M.D.'s who practiced in those changing years.

Dr. Marshall had many interests, and ends his book with the thought—"Life is beautiful, time is fleeting—and there is so much to do!" C.G.S.

Skin Grafting. By James Barrett Brown, M.D., Professor of Clincial Surgery, Washington University School of Medicine; Chief Consultant in Plastic Surgery, Veterans Administration; Senior Civilian Consultant in Plastic Surgery to Surgeon General, U. S. Army; and Frank McDowell, M.D., Associate Professor of Clinical Surgery, Washington University School of Medicine, St. Louis, Missouri. Third Edition. 328 Figures and 6 Color Plates. J. B. Lippincott Company, Philadelphia. 1958. Price $15.00.

This is thorough coverage of a field of surgery that has made much progress in the past few years. The presentation is concise, clear and in adequate detail to be an excellent clinical guide. Interesting photographs illustrate the text, and numerous diagrams clarify the details of technic.

A thorough coverage of the problems of burns is made, with descriptions of the morphology of burned tissue, and its effect upon the entire organism, the process of healing, and the method of dealing with all the problems of handling the patient from the moment of the burn to the time of return to normal life. The great value of homografts as a life saving procedure in the extensively burned patient is discussed.

In subsequent chapters the handling of numerous other common types of injury is well covered, as is the repair of tissue loss in the various parts of the body. The authors classify the different types of grafts and flaps and explain the indications for the use of each of them. J.E.L.

Practitioners' Conferences Held at the New York Hospital-Cornell Medical Center, Volume 6. Edited by Claude E. Forkner, M.D., F.A.C.P., Professor of Clinical Medicine, Cornell University Medical College; Attending Physician, The New York Hospital; Consultant in Medicine (Hematology), Roosevelt Hospital; Consultant in Internal Medicine, Bronx Veterans Administration Hospital. Appleton-Century-Crofts, Inc. New York, 1957. Price $6.75.

The present volume is the sixth in a series having the policy of assembling the best opinion available in the New York area on the subjects considered. Each chapter records one conference on actual clinical problems existing in the Clinics of the New York Hospital.

The first chapter, "Should Patients Be Told the Truth About Serious Illness?" is an important one, worthy of any clinician's consideration. After its presentation of some aspects of the patient-doctor relationship, this reviewer was somewhat dismayed to find in the next chapter on "Trichinosis" and in several others, discussions in the patient's presence of possible fatal complications, adverse course of the illness, effects of medications, and what medications might have been used. This aspect of teaching case presentations unfortunately still exists in some places.

One third of the book is devoted to chapters on various tumors: thyroid, prostate, esophagus, lung and bone. They emphasize diagnosis, variability in laboratory findings, treatment, pathologic classification, and the need for methods of detection before these specific types of cancer become clinically apparent. Excellent roentgenograms are reproduced in two of these chapters.

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1. Landes, R. P. and Peters, M.: Postgrad. Med. 23:648, June 1958.

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either to intrahepatic or extrahepatic blocks are clearly delineated in one chapter. One conference on “Early Detection of Heart Disease” is really concerned with moderately advanced heart disease. Following a chapter on “Superficial Fungous Diseases,” one is devoted to “Poison Ivy and Contact Dermatitis” which includes a succinct discussion of types of sensitivity reactions. Considerations of encephalitis and parkinsonism, endometriosis, consultations with anesthesiologists, and gout conclude this volume.

The editor’s outline summaries of each chapter are very helpful if one wishes a definitive statement of the current ideas on the particular subject. H.F.G.

The Story of Peptic Ulcer. By Richard D. Tonkin, M.D., F.R.C.P., Westminster Hospital, London; and characterised by Raymond K. Hellier, F.R.S.A. W. B. Saunders Company, Philadelphia. 1957. Price $2.25.

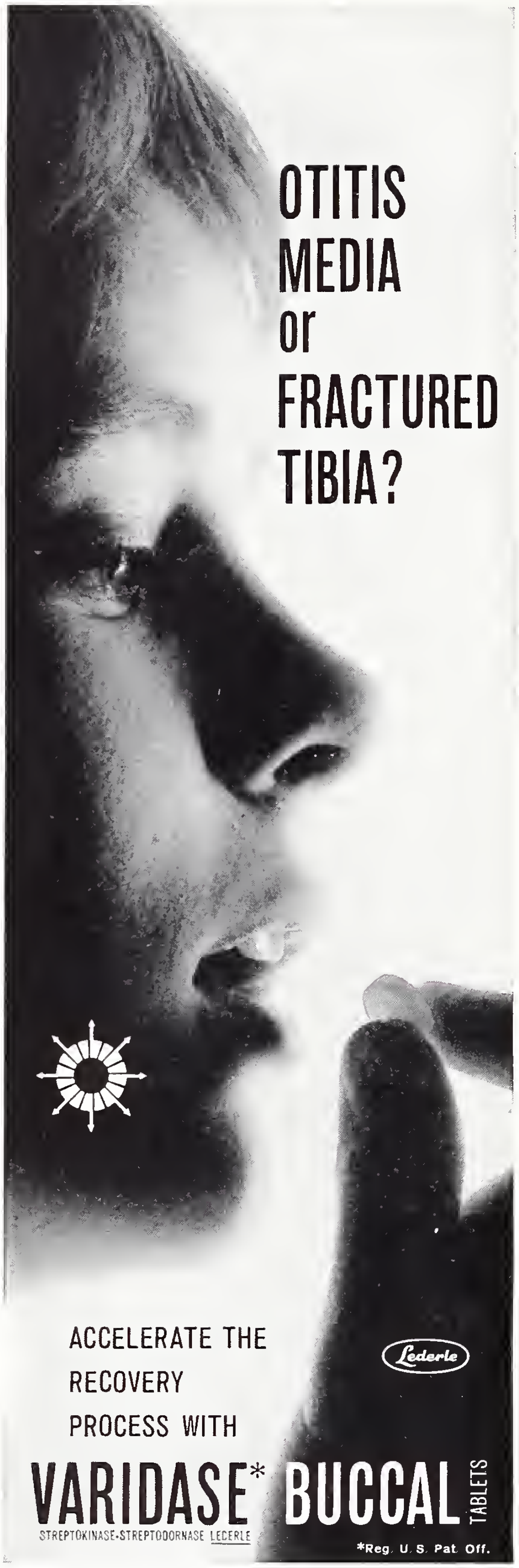
The presentation of the subject of peptic ulcer is carried out in this book by means of text and adequate cartoons. It is written in language that applies both to physicians and laity. The latter may find the subject matter of great interest and the presentation clear and lucid.

The subject is carried through from physiologic pathology to symptomatic manifestations and ultimately to suggested therapy. Dietary rigidity in therapy, while not discarded, is softened to satisfactory flexibility which seems adequate to relieve symptoms and maintain the interest of the patient in the therapeutic regimen.

The cartoons are designed to amplify and graphically demonstrate the text and may serve well to explain a particular problem to the ulcer patient. Employing a growing tendency toward graphic demonstration in the presentation of medical subjects, this book has a definite place in the literature of the subject. A.M.

Fluid and Electrolytes in Practice. By Harry Statland, M.D., Associate in Medicine, University of Kansas School of Medicine Chief, Division of Internal Medicine Menorah Medical Center, Kansas City, Missouri, Consultant in Medicine, Veterans Administration Hospital, Kansas City, Missouri. Second Edition. J. B. Lippincott Company, Philadelphia-Montreal, 1957. Price $6.00.

This is an excellent coverage of electrolyte and fluid balance in a concise and most easily readable form. The topic is presented in language which any physician or medical student can readily understand. The book leaves one with a clear picture of the subject matter and will definitely untangle many confused impressions obtained from reading larger volumes on this subject. J.F.M.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BOOK REVIEWS

Principles of General Surgical Management. By H. A. F. Dudley, F.R.C.S.E., Lecturer in Surgery, University of Edinburgh; with the assistance of: B. C. Paton, M.R.C.P.E., The Royal Infirmary of Edinburgh; I. F. MacLaren, F.R.C.S.E., The Royal Hospital for Sick Children, Edinburgh; I. B. Tait, F.R.C.S.E., St. Mary's Hospital, London; G. F. Murnaghan, F.R.C.S., F.R.C.S.E., The Western General Hospital, Edinburgh; with a foreword by John Bruce, C.B.E., T.D., F.R.C.S.E., Regius Professor of Clinical Surgery, University of Edinburgh. E. & S. Livingstone, Ltd., Edinburgh and London. 1958. Price $6.50.

It has been a real pleasure to review *Principles of General Surgical Management,* written by H. A. F. Dudley, F.R.C.S.E. of the University of Edinburgh. This little book is comprehensive and full as well as being concise. The subject matter is well presented and covers well the general management of surgical cases with some of the most common complications that are confronted. The book is and will be an excellent book for reference for the resident as well as the surgeon. Three chapters in the book stand out. The chapter on the preparation of the patient for surgery, the treatise on shock and its treatment, and the immediate postoperative period in the recovery room.

We have the impression that this book is well worth reading by all surgical students, interns and for all surgeons in general. We can well recommend it to you. J.B.C.

Fifty Years of Neurosurgery. A Personal Story. By Ernest Sachs, M.D. Vantage Press, New York, Washington, Chicago and Hollywood. 1958. Price $3.50.

This book is not only the story of the life of Ernest Sachs, it is also the story of the birth and development of neurosurgery as a specialty. Sachs, who was to become the first neurosurgeon west of the Mississippi, acquired his skills under the tutelage of the pioneers such as Horsley, Cushing and others.

In an interesting and readable style this book is the story of his childhood, his education, his association with some of the grand old Masters, Halstead, Osler and Welch of Johns Hopkins and later the group who revitalized Washington University Medical School and elevated it to the front ranks.

The stories of his later travels make interesting reading.

Sachs professes a great love for teaching. This reviewer was one of his students in his earlier days at Washington University and often affirmed that Ernest Sachs was the best teacher he found in any of the several colleges and schools he attended. A.L.W.

Curiosa et Trivia

Within a week of the recent American Airlines crash in New York, American insurance companies calculated that the total claims (for insurance in force) would exceed five million dollars. Liability insurance is expected to run into many more millions.

Having fought your way through the detail literature and samples, and having listened to countless detail men in the same period, you won't believe this: new products introduced in 1958 numbered only 370, compared to 400 in 1957.

As received through all media (newspapers, magazines, TV, radio), the American public appreciates scientific news of heart disease first. This is followed closely by cancer information, then polio, and mental illness.

Not news, but worth remembering: cancer takes a greater number of lives in the 5 to 14 age group than any other disease.

The year 1958 showed a reduction of 4,000 fatal accidents below 1947—the lowest since 1954—but sill 91,000 . . . or the total combined population of Cape Girardeau, Jefferson City, Columbia and Rolla.

Despite the spectacular publicity, major aircraft accidents accounted for only 169 of these fatalities.

Capsule Clinics

- Serum bilirubin determinations were made in 119 premature and full-term infants who received water-soluble vitamin K (Synkayvite) and vitamin K_1 (Mephyton). Synkayvite increased bilirubin values whereas Mephyton did not. In fact, vitamin K_1 lowered the mean serum bilirubin level below that observed in untreated controls. The authors hesitate to draw definite conclusions regarding this observation at the present time. Asteriadou-Samartzis, E. and Leikin, S., Pediatrics **21**:397, 1958.

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WASHINGTON

It has a familiar sound, although one name is missing. Sen. James E. Murray and Rep. John D. Dingell introduced identical bills in the Senate and House the middle of February. The sponsors say that their plan will "provide the one thing needed to furnish an adequate health program to the people of the United States." The bill is substantially the same in its insurance features as the original Wagner-Murray-Dingell bill of a decade and a half ago. The bill does not rest on a taxation set-up, employers and employees share the cost, the employees contributing a maximum of $90 a year for complete health care of themselves and dependents. It is felt the taxation feature was left out to increase chances of the bill being referred to the House Commerce Committee of which Rep. Dingell is a member. Senator Murray ranks next to chairman of the Labor and Public Welfare Committee, to which it was referred in the Senate. Senator Murray finds it "amusing" that the A.M.A. today is unopposed to federal grants for training of public health personnel, aid to medical research, hospital construction subsidies and several other components of the original Wagner-Murray-Dingell bill. The bills are S. 1056 and H.R. 4498. The first similar bill was introduced 14 years ago by Senator Murray, the late Sen. Robert F. Wagner and the present Dingell's father, the late Rep. John Dingell.

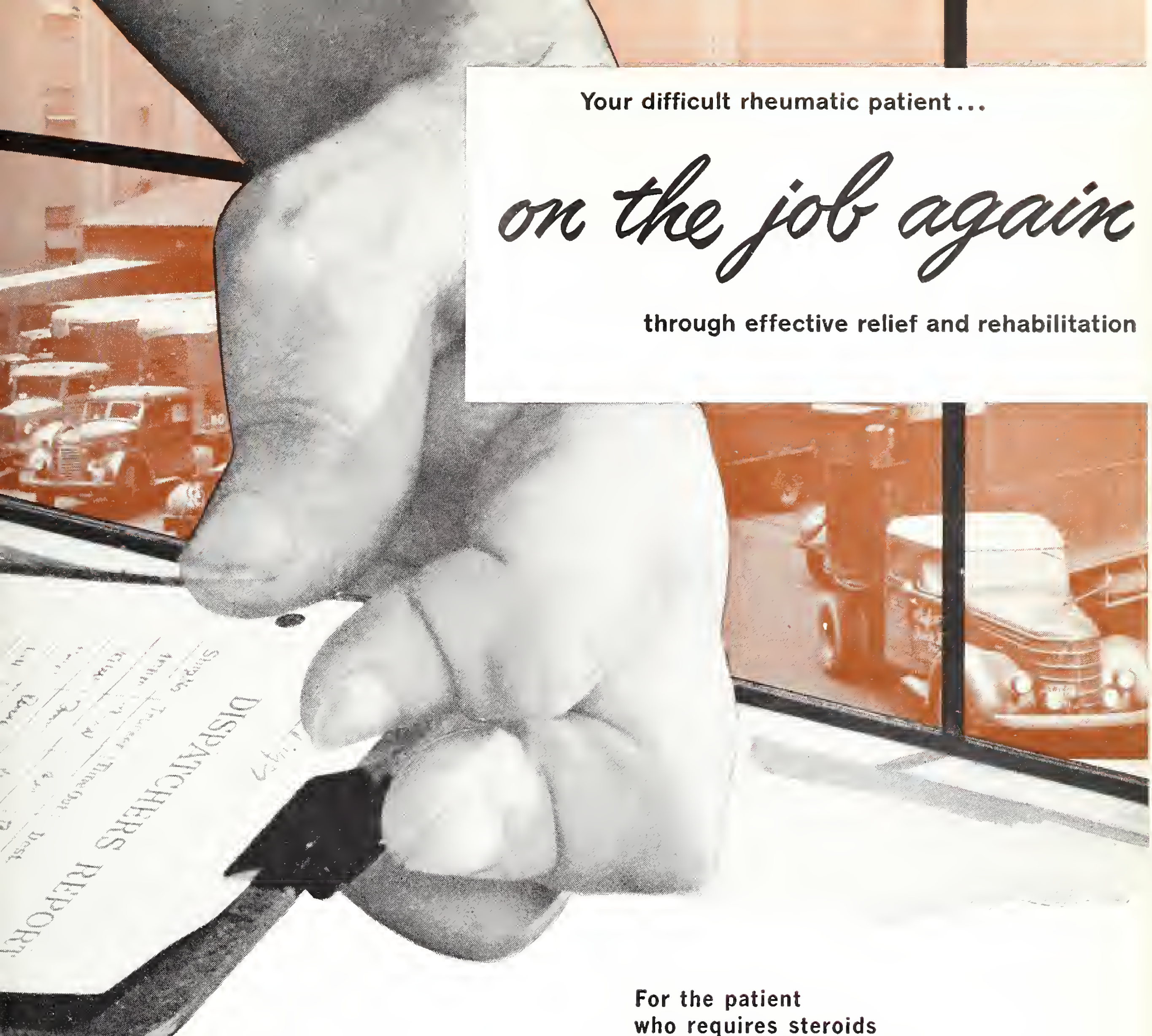
A bill to bring physicians under social security was introduced by Sen. Thomas J. Dodd of Connecticut, and later Sen. Richard Neuberger of Oregon said he wished to be cosponsor of the bill. Senator Dodd said he was motivated by requests of individual physicians and information that some of the state's county medical societies had voted in favor of social security for physicians. Senator Neuberger did not take his seat in the Senate until the later part of February, following surgery for cancer of a testis. He told a news conference that he will run for reelection if his health permits, instead of returning to writing as he had intended, for he says "But for this illness, I'd be just another liberal Democrat. Now I have an opportunity to be an exhibit on the importance of medical research."

Three members of the health subcommittee of the Senate Labor Committee are sponsoring a measure for a two year study of the health needs of all citizens. A 15 man commission would recommend to the President and to Congress necessary legislation to supplement or stimulate broader health protection coverage by existing private and nonprofit programs. The commission would study the following fields: (1) The adequacy of existing programs of health insurance and group or cooperative health plans in meeting over-all health service needs; (2) necessity for extending health insurance coverage to provide adequately for retired or elderly persons, those temporarily unemployed and those suffering from mental illness, (3) problems experienced by the aged, members of racial or other minority groups and residents of rural areas in securing health insurance, (4) the effect which expanded coverage of such plans would have upon the adequacy of the existing number and distribution of health personnel and facilities.

Forand has completed the rewriting of his bill, 1959 version, and introduced it on February 18. This would use the social security system to provide hospitalization and surgical services for those eligible for OASI benefits. It is H.R. 4700. It differs from the 1957 bill in that it permits surgical services to be performed by other than board-certified members. For financing, the bill would increase social security taxes by ¼ of 1 per cent for both employee and employer and ⅜ of 1 per cent for the self-employed, these increases in addition to those already planned. In a statement placed in the Congressional Record, Rep. Forand said that the Department of HEW report on various means of financing medical care for the retired aged is due to be sent to the committee in March "when I hope the committee may be ready to commence hearings." The committee hearing had not been set.

Problems of the aged and aging will be the subject of a year-long inquiry by a new subcommittee of the Senate Labor and Public Welfare Committee. Heading the study group is Senator Pat McNamara (D., Mich.). The subcommittee is expected to range the whole field of problems of the aging including health, housing, employment opportunities and recreation. Senator McNamara said he considered meeting the problems of senior citizens "one of the greatest sociological challenges facing America today." It is expected that recommendations for specific legislation will come at a later time.

"Visit the U. S. A." year for 1960 was proclaimed by President Eisenhower this spring. During last year it is estimated that 847,760 foreigners came to the United States, other than immigrants, this in addition to 6 million Canadians. On the other hand, the estimated number of Americans who went to the Continent numbered about 685,000, while the number from European countries visiting the United States was estimated at 376,613.



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Across Missouri

Reading as a sleep inducer is going to have a blow dealt it this month. April 12 to 18 is being planned as "Wake Up and Read" week. Purpose will be to encourage reading in homes, schools, churches and civic centers.

Distribution of physicians, especially into rural areas, has been discussed for many years now. It was one of the big considerations in the establishment of the four year medical school at the University of Missouri. Now comes the information that there is maldistribution within the metropolitan area of St. Louis. Mr. Wayne Conwell, a management consultant to physicians and dentists, recommends that medical societies gather information about population trends in the development of new suburbs and make that information available to physicians seeking new offices. This advice was given at a meeting of the St. Louis County Medical Society.

It was 75 years ago, in 1884, that the governor of Missouri appointed eight Missourians to the first state board of health. The action was taken as an emergency measure because typhoid fever and smallpox were taking the lives of so many Missourians each year. The primary function of the new state board of health was to quarantine and isolate, with police power if necessary, those persons who had contracted communicable disease. Governor Blair, in addressing the American Public Health Association, pointed out that "1959 brings us to the threshold of an entirely new era of human experience. We refer to this as the 'space age.' It is extremely important that we anticipate the public health needs that will arise as we move into this age, and not wait until emergency forces us to act."

An unexpected industry has come to the Midwest, to Kansas City. The Midwest Research Institute will be the location of a six-month project in studying efforts to convert saline water into fresh water. The aim is to test new procedures that extract salt from water by use of a solvent. So far scientists have been unable to find a simple and inexpensive method of converting salt water into fresh water, but it is surprising that the Department of the Interior sponsors such a study in the center of the country.

Missouri's neighbor state, Kansas, is celebrating its century mark this year. The Kansas Medical Society was established by act of the territorial legislature, and the society's first meeting was held February 10, 1859, at Lawrence. It was attended by 29 charter members. That society, as did Missouri, suspended sessions during the Civil War.

Speaking before the committee in the Legislature on the budget of the University of Missouri School of Medicine, President Elmer Ellis and Dean Roscoe L. Pullen said that quality of service in the University Hospitals would not be cut, rather that all beds would not be used should the appropriation not be sufficient for full operation.

It is reported that 459 nursing homes in the state are operating under the Nursing Home Licensing Law enacted by the last General Assembly, 260 in full compliance and the remainder in the process of complying. The Division of Health has cited 39 nursing homes for failure to comply with the law.

"Family Vacationland" has been suggested in the Legislature for appearance on the new automobile license plates. That Missouri is fast becoming a vacationland is shown by the 3,365,005 persons visiting the state parks in 1958, an increase of 62 per cent in the last three years. Last year three new rural recreation areas were added, Wappapello, Trail of Tears and Table Rock, and work will begin soon on the Mark Twain shrine. While figures show that Missouri is becoming increasingly a vacationland, the advertising of that fact on license plates has not met with universal approval. The Kansas City *Times* of February 28 carried the following editorial under the title "License-Plate Advertising."

"Missouri motor car license plates are clean cut and distinguished because they bear no slogans advertising cheese, mountains, wheat or other surplus commodity or geographical accident that happens to glorify or curse a state.

"But now the Missouri House wants to emblazon the tags with the legend: 'Family Vacationland.' This fine sentiment conjures up pictures of jolly babies playing on the Ozark beaches with Mom and Dad looking on. We see serious youngsters guided through Mark Twain cave and whole families viewing the wonders of Kansas City and St. Louis.

" 'Family Vacationland' is a fitting label coined by the Division of Resources and Development and should be placed in advertisements far and wide. But its effectiveness on the license plates of Missourians who have driven elsewhere for vacations is questionable.

"License plates bring revenue to the state and are a means of identification for the convenience of the law. They aren't small billboards. Let us hope the Senate can resist the temptation to force Missouri into the ranks of states with silly slogans."

Legislation Affecting the Practice of Medicine

T. R. O'Brien

S.B. 50, the single license bill, is pending in the Senate Committee on Public Health and Welfare.

Opposition to the act has been presented by the Missouri Hospital Association. In a bulletin to members explaining the bill, the Hospital Association points out that "the bill has within it, sections capable of reducing hospitals to board and room propositions."

"The Missouri Hospital Association recommends that the potential dangers in this bill be disseminated to all trustees and that these trustees be urged to contact their state representatives and state senators voicing their opposition to the bill as it is presently written." The Hospital Association believes that the bill *should be amended so that hospitals duly licensed under the Missouri Hospital Licensure Law would be excluded* from the proposed act.

The Council has considered a number of amendments which have been proposed by lawyers representing the Hospital Association. Up to the time of this publication, little, if any, progress has been made toward a solution.

House Bill 1, Vendor Legislation, has passed the House and is pending in the Senate Committee on Public Health and Welfare. As recommended by the MSMA House of Delegates, payment of benefits for physicians' services is not included under the bill.

Provision is made in the legislation to make payment to hospitals for acutely ill welfare recipients and to nursing homes for bedfast and completely disabled persons.

An amendment was to be offered at the Senate hearing to require the appointment of an advisory committee on medical matters and to provide for Doctor of Medicine representation on that committee. Enactment of such a provision is in line with MSMA House of Delegates recommendations.

House Bill 220, regarding Blue Cross-Blue Shield, *was defeated* in the House Committee on Insurance. This bill would have placed the Blue Cross-Blue Shield Plans in Missouri under the jurisdiction of the state superintendent of insurance.

House Bill 232, dealing with the various state licensing boards, including the Board of Medical Examiners, is pending in the House, following approval of the Committee on Government Reorganization.

The bill, as presently written, will seriously weaken the Board of Medical Examiners in that the director of the department of business administration would become secretary of each of the licensing boards. All employees would be appointed by the director instead of by the licensing boards.

The bill also provides for one layman to be appointed to each examining board.

S.B. 24, pending in the Senate Committee on Public Health and Welfare, changes the chiropractic practice act by requiring four years of chiropractic schooling instead of three, altering the definition of chiropractic and changing some of the subjects upon which candidates for a license are examined.

The definition of chiropractic would be changed by adding language to include diagnosis and adjustment of tissues adjacent to the spine. At the same time, present limitations restricting chiropractic practice to palpation and adjustment by hand would be eliminated. Subjects the bill would add to the list to be included in the examination of candidates are clinical diagnosis, spinography, bacteriology and biochemistry.

The bill appears to be an attempt to broaden chiropractic practice to include diagnosis, even though such practitioners are not qualified or licensed to treat the conditions which might be diagnosed. In addition, the present restriction of hand manipulation has been eliminated.

S.B. 135, relating to radiation protection, is pending in the Senate Committee on Public Health and Welfare. The bill provides that the Division of Health may formulate rules and regulations regarding sources of radiation, and study hazards of radiation. If the bill is seriously considered, an amendment will be requested providing for a Medical Advisory Committee.

House Bill 466, relating to immunization for poliomyelitis, is pending in the House Committee on Education.

The bill provides that the Board of Education of any school district may require all pupils to receive immunizing treatment against poliomyelitis as a prerequisite to attendance at school, except on certification of physician that pupil is unfit to receive such immunizing treatment.

The bill exempts pupils if their parents sign a statement objecting to immunization on the basis of religious belief.

House Bill 370, pending in the House Committee on Public Health, regulates the sale of barbituric acid or derivatives and compounds thereof.

The bill provides that a written prescription is required as a prerequisite to each sale of amphetamine, or desoxynor-ephedrine, commonly called "benzedrine."

Missouri Division of Health

H. M. HARDWICKE, M.D., *Acting Director*

THE PUBLIC HEALTH NURSE

The public health nurse can be of immeasurable value to a practicing physician.

Home visits have always been a paramount and expected part of the public health nurse's work. The elementary needs of home nursing service to all members of the family have remained the same. However, many new facets have developed—maternal and child health, communicable diseases, school health, chronic illness, care of the aging, and the growing shadows of an atomic age. In addition, a good program of home visiting coordinates principles of good mental hygiene, dental hygiene and nutrition.

Follow-up visits to the home resulting from physician and hospital referrals are an integral part of the public health nurse's program. The nurse's services are especially valuable to the young parents who are expecting their first baby.

The public health nurse works with the family in the home and serves as both nurse and health consultant. She discusses the patient and his situation with the family physician before making a home visit.

She can do follow-up on tuberculosis and venereal disease cases or others referred by the family physician. In this area she may help the family carry out isolation procedures. She may teach the family to collect specimens and thus assist the physician with his diagnosis. She helps to find people who have been exposed to communicable diseases and assists them in securing medical care.

The public health nurse may, at the request of the physician, assist the patient or family to complete application papers for hospital admission to Missouri State Sanitorium, Ellis Fischel State Cancer Hospital, or admission to State Crippled Children's Service. Upon discharge from the hospital, the nurse may assist the family with specific nursing procedures.

She may help the family plan an adequate diet according to its food needs and its budget. This may include nutrition for the pregnant and lactating mothers, low-salt diets, diabetic diets, a normal balanced diet or whatever is ordered by the physician. The family is helped to plan, using the same food for special diet and the family diet.

In visits to the maternity patient, the nurse may give attention to antepartal and postpartal observation as well as demonstrations and instructions for the infant.

The public health nurse may give or teach nursing care to some other member of the family and follow through with the family until someone becomes competent in giving care. This may include demonstration of a bed bath, instructions in TPR and the proper cleansing of thermometer, giving enemas, sterile technic in changing dressings, and medication by hypodermic. For example in diabetic patients, a member of the family may be instructed how to ascertain dosage and the care of syringe and needle; how to check the urine for sugar; how to substitute foods in the diet and the need for good personal hygiene. Symptoms of insulin shock and insulin reaction, may also be taught.

She will work with patients and families and upon the recommendations of the physicians teach them the exercise in "Strike Back at Stroke." The public health nurse sends a report to the family physician regarding his patient after each home or office visit.

The public health nurse is a professional registered nurse with special preparation and interests in working with the public. She can only work under medical direction and functions in those areas that have been approved by the local or state medical association. She is not interested in conducting indigent care programs.

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SPECIFIC ANTIHISTAMINIC ACTION in the treatment of a variety of skin disorders commonly seen in your practice.

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REFERENCES:
1. Eisenberg, B. C.: Clinical Medicine *5*:897-904 (July) 1958.
2. Feinberg, A. R., et al.: J. Allergy *29*:358 (July) 1958.
3. Robinson, H. M., et al.: So. Med. J. *50*:1282 (Oct.) 1957.

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Missouri Academy of General Practice

John F. Pearl, M.D.

FOURTH ANNUAL SPRING CLINICAL CONFERENCE

The fourth annual Spring Clinical Conference at the University of Missouri, jointly sponsored by the University of Missouri School of Medicine, the Missouri Heart Association and the Missouri Academy of General Practice, will be held May 13 and 14. There is no registration fee and is acceptable for a maximum of 12 hours of Category I postgraduate credit. All members of the Missouri State Medical Association are invited as well as members of the Missouri Academy of General Practice.

PROGRAM

Wednesday, May 13, 1959

P. V. SIEGEL, M.D., Smithton, Presiding.

8:00 a.m. Registration.

9:00 a.m. Welcome, Roscoe Pullen, M.D., Columbia, Dean, University of Missouri School of Medicine.

9:05 a.m. Diuretic Therapy, G. Thorpe Ray, M.D., Columbia, professor of medicine.

9:40 a.m. Coffee Break.

10:00 a.m. Amebiasis, Harold W. Brown, M.D., New York, professor of parasitology, College of Physicians and Surgeons, Columbia University.

11:00 a.m. Panel: Current Concepts of Diabetic Therapy.
- Moderator:
  - Robert L. Jackson, M.D., Columbia, professor of pediatrics.
- Panelists:
  - Randall G. Sprague, M.D., Rochester, professor of medicine, Mayo Foundation.
  - Thomas W. Burns, M.D., Columbia, associate professor of medicine.

12:30 p.m. Lunch. Panel of Experts, H. O. Loyd, M.D., Moderator.
  Jacob S. Roden, M.D., Columbia, presiding.

2:00 p.m. Pathogenesis of Peptic Ulcer, Lester R. Dragstedt, M.D., Chicago, professor of surgery. University of Chicago School of Medicine.

3:00 p.m. Coffee Break.

3:15 p.m. Panel: Cardiac Surgery.
- Moderator:
  - Kenneth K. Keown, M.D., Columbia, professor of anesthesiology, University of Missouri.
- Panelists:
  - S. Gilbert Blount, M.D., Denver, cardiologist, University of Colorado Medical Center.
  - Theodore E. Keats, M.D., Columbia, associate professor of radiology, University of Missouri.
  - Jack M. Martt, M.D., Columbia, assistant professor of medicine, University of Missouri.
  - Hugh E. Stephenson, Jr., M.D., Columbia, professor of surgery, University of Missouri.

7:00 p.m. Annual Dinner Meeting of the Missouri Heart Association, Tiger Hotel, Columbia.
  E. E. Glenn, M.D., Springfield, presiding.
  Speaker, S. Gilbert Blount, M.D., Denver.

Thursday, May 14, 1959

WYETH HAMLIN, M.D., Hannibal, presiding.

9:00 a.m. Demonstration and Panel: The Cardiac Surgery Program of the University of Missouri Medical Center.
- Moderator:
  - William H. Wade, M.D., Columbia, assistant professor of surgery, University of Missouri.
- Panelists:
  - Owen A. Kearns, M.D., Columbia, associate professor of preventive medicine, University of Missouri.
  - Vincent P. Perna, M.D., Columbia, assistant professor of pathology, University of Missouri.

10:00 a.m. Coffee Break.

10:15 a.m. The Diagnosis and Management of Rheumatic Fever, S. Gilbert Blount, M.D., Rochester.

11:15 a.m. Panel: The Management of Peptic Ulcer.
- Moderator:
  - J. Ned Smith, M.D., Columbia, assistant professor of medicine, University of Missouri.
  - Lester R. Dragstedt, M.D., Chicago.
  - Robert H. Barnes, M.D., Columbia, clinical associate in psychiatry, University of Missouri.
  - Gwilym S. Lodwick, M.D., Columbia, professor of radiology, University of Missouri.

12:30 p.m. Lunch. Panel of Experts, C. S. Anast, M.D., Columbia, Moderator.
  Owen A. Kearns, M.D., Columbia, presiding.

2:00 p.m. Diabetic Acidosis, Randall G. Sprague, M.D., Rochester.

3:00 p.m. Panel: Parasitology.
- Moderator:
  - Vincent P. Perna, M.D., Columbia.
- Panelists:
  - Harold W. Brown, M.D., New York.
  - Clement E. Brooke, M.D., Columbia, assistant professor of pediatrics, University of Missouri.
  - Michael H. Ivey, Ph.D., Columbia, assistant professor of microbiology, University of Missouri.

The Woman's Auxiliary

Mrs. Henry C. Bauman

Someone has said, "The board meeting is a check-up and the convention a clean-up." I am reading the points system reports and hearing from many of you concerning reports of various kinds. I soon will be assembling the data and facts for the State of Missouri, in answer to all the questions national sends me. When one has been close to the work and the workers in the various organizations as the president, she finds reports not dull as they are usually accredited to be, but very interesting reading. I read along and remember hearing you discuss your plans for such and such a meeting and as I read the outcome of those plans I feel a part of them —I see the sparkle and life in them.

I approach the time when I am doing these various things for the last time. Even if a task has been difficult, when done for the last time there is an element of sadness. Practically every phase of the Auxiliary work has brought satisfaction and reward to me and the sadness that I feel now is in the fact that I wish I could have done more with this golden opportunity accorded me here on the pages of MISSOURI MEDICINE. The Auxiliary is indeed grateful for this space that is so generously given us. This has been my most constant contact with the auxiliaries. Though never a journalistic triumph it has been my most complete résumé of national's directives to me. And my only wish is that we might make better use of this opportunity of contact. I feel certain that often the doctors skip this page themselves and then forget to take it home to their wives. It is written hoping that the men will see the work of the Auxiliary and help us more effectively be good public relations messengers. We want always to do things that our parent organization wants us to do and, next, we want to carry out our own projects in a way that will be pleasing to them; however, we cannot always wait for directives from the men's group because in many instances we would be doing nothing at all if we waited for busy doctors to suggest our activities to us.

Our own members should read the articles published here. One of the amazing things about the Auxiliary work is the "stretchability" of our program. As I read the things being done in the nation and this state by different groups—in service, in constructive work—all within the limits of the Auxiliary program I am amazed. And the Auxiliary member who does not read all available material has lost the scope of good we can do. We see each other only twice a year so it becomes necessary that we "synchronize" our activities by reading together.

One of our most frequently aired complaints is that our programs are planned and generally printed in the summer before the board meeting, before the new national chairmen write their directives—and before literature arrives either from the state or national heads. Though this is true I hope you will keep in mind that we carry on from year to year with an overlapping program. In this fast moving age we work with a passing parade and though health ideas and programs may seem old to us they are new to the public and many of the people for whom they are presented. However, to aid you in this problem I will present at the convention some of national's latest and most outstanding publications which would be the basis for good programs within your group or before the public. The A.M.A.'s latest film "The Medicine Man" will be shown—Today's Health Film Strip—the Dr. Dolliwell record and any other new things that can be obtained. If you miss seeing these write me or Marj Peterson and we will help you obtain them. These ideas will be presented in one way or another so that you can take back some ideas for programming this summer.

Before my mind appear so many names and faces that I dare not try to list them, of people who have helped to make this year the wonderful experience it has been. People to whom saying those two little words "thank you" seems entirely inadequate. As I have visited with you this year I have seen so many capable girls who are qualified to lead this organization. I have wished that I could say the right things to them so that they would be willing to accept this responsibility. It demands some sacrifice—it takes some time—yes—but it is well worth anything it asks of you. It has compensations greater than I can list or describe. It challenges you and you grow to meet that challenge. It increases your friendships and enriches your life in many ways.

And now as I sing my "swan song" and prepare to pass on to my successor the symbols of authority I want to say that to know Marj Peterson is to love her. No more capable person could take this position than she and I am so happy to pledge to her my loyalty and support and say to her—may you find the gratification and happiness and help that I have found this year, and may all good things come to you.

Many of the county groups have papers and communications circulated among their own members. I have enjoyed reading these.

NOW...
for congestive heart failure
for other edematous states
for hypertension...

Missouri Medicine

JOURNAL OF THE MISSOURI STATE MEDICAL ASSOCIATION

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Vol. 56 April, 1959 Number 4

Blood Transfusions: Uses and Abuses

VIRGIL LOEB, JR., M.D., *St. Louis*

There must be at least three guiding principles for proper transfusion therapy, namely (1) that the absence of a specific indication is the most important contraindication to the use of blood, (2) that the therapeutic benefits to be anticipated should outweigh the hazards of transfusion therapy, and (3) that maximum benefits will be obtained only if the transfusion material chosen is that which best supplies the patient's need. It is the purpose of this presentation to emphasize these cardinal principles and to assess the role of transfusion therapy in clinical medicine.

HISTORICAL REVIEW

The first impetus to the thought of blood transfusions came in the early 17th century when the concept of the circulation of the blood was enunciated by William Harvey. Early experiments in this field were concerned with the use of animal blood and in 1667 Denis of France transfused 9 ounces of lamb's blood into a 15 year old boy. A recorded account of this early transfusion is as follows: "He abated nothing of his jovial humor during the process and when it was over zestfully cut the throat of the lamb and fleeced it, that having been his profession all his life. . . . On the morning after the transfusion the patient passed a great glassful of urine of a color as black as if it had been mixed with the soot of chimneys."

This not only records, perhaps, the first transfusion but also the first transfusion reaction. It was not until 1818 that Blundell of London gave the first transfusion of human blood, and it was actually only a little more than 80 years ago that the first transfusion was given in the United States. The privilege of being able to use blood transfusion therapy is one which has come through painstaking and often brilliant work in the field of immunohematology and blood preservation. In 1927 Landsteiner predicted that human beings have blood group patterns as distinctive and individual as fingerprints. With the almost continual discovery of new blood groups this appears to be a reality. Through the development of anticoagulants and suitable blood preservatives, this therapy has progressed from the crude dextrose-citrate mixture of 1916 which required more than three pints of solution to preserve one pint of whole blood for a few days to the present ACD solution developed during World War II with which 75 ml. of solution will preserve 500 ml. of blood for from three to four weeks.

What is the current scope and magnitude of blood banking and blood transfusion therapy and how important is it in medical practice? It has been estimated that in 1950 approximately 2.5 million units of blood were collected in the United States, and that two years later during the Korean campaign 7 million units of blood were collected. It is extremely difficult to estimate the actual extent of transfusion practices in the United States because of the lack of agreement as to just what constitutes a transfusion, and, indeed, a blood bank. In an attempt to provide a central reference for information pertaining to blood transfusion facilities and services the Joint Blood Council, whose membership consists of representatives of the American Association of Blood Banks, the American Hospital Association, the American Medical Association, the American National Red Cross, and the American Society of Clinical Pathologists, has undertaken to survey as many hospitals and blood banks in the United States as is possible and is now distributing a directory which will give much needed information on the scope of this problem. It has been estimated that in 1956 almost two million individuals in this coun-

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Presented before the Annual Clinical Meeting of the American Medical Association, Minneapolis, Minnesota, December 4, 1958.

From Department of Internal Medicine, Washington University School of Medicine, St. Louis.

try received slightly over 4.5 million transfusions of blood.

INDICATIONS FOR TRANSFUSION THERAPY

It must be pointed out that the collection of human blood in ACD solution inevitably involves some degree of alteration from the normal functional capacity of the cellular elements as well as disturbance of the electrolyte composition of the plasma and denaturation of the labile proteins, particularly those involved in coagulation. This may be emphasized by an example: A patient with aplastic anemia who is going away on a long summer vacation wants to be assured that two months after a series of transfusions he will have a red count of at least 2 million cells per cu. mm. It may be assumed that 1,000 ml. of transfused fresh blood will raise the recipient's red count by approximately 1 million red cells per cu. mm. It is well documented that 60 days after a transfusion of fresh blood approximately 50 per cent of the original cells still survive; but if three week old blood is administered to a recipient he will have only 35 per cent of the original cells surviving two months after the transfusion. It may be calculated that in order to assure this patient that he will have a red count of at least 2 million at the time that he returns from his vacation he would need to be transfused with approximately 4 liters of fresh blood, but he would require almost 6 liters of three week old blood in order to provide this level.

This illustrates that the use of whole blood must be governed by the specific indication in the recipient, and although three week old bank blood is completely satisfactory for blood replacement during surgery or following trauma, it is better to transfuse blood that has been stored for only a short time to patients whose marrow is not producing red cells at a normal rate and who will require transfusions over a protracted time. It is also important to emphasize that red cells of ACD blood from which the plasma has been removed retain their viability to a degree comparable to that of red cells stored as whole ACD blood. If the indication for transfusion is the replacement of red cells which cannot be produced by a patient with bone marrow failure or in the management of certain types of hemolytic anemia, the use of *separated red cells* is a valuable form of therapy which avoids the administration of excessive fluid in the form of plasma that is not needed by such an individual. The *plasma* from which the red cells have been separated may be used in the treatment of shock or hypoproteinemia and in the management of certain hemorhagic disorders, either as the whole substance or after fractionation into its protein components. The processing of albumin, gamma globulin, fibrinogen and other factors provides replacement therapy for specific deficiencies in selected patients. The use of platelet-rich plasma has been instrumental in preventing bleeding from certain patients with thrombocytopenia, and fresh-frozen plasma is invaluable in the treatment of hemophilia. Table 1 lists the major components of whole blood which are available for transfusion therapy.

TABLE I

MAJOR COMPONENTS OF WHOLE BLOOD

Whole Blood ("Fresh" or "Stored")	
Formed Elements	*Plasma*
Red Cell Suspensions	Pooled Plasma
"Buffy-poor" Preparations	"Fresh Frozen" Plasma
"Platelet-rich" Preparations	Fibrinogen, Albumin, AHG Gamma Globulin, etc.
"Washed" Red Cells	
Blood Preservatives	
ACD	Heparin
"Edglugate-Mg"	Glycerol-Freezing
Plastic Equipment	

HAZARDS OF TRANSFUSION THERAPY

Most physicians are familiar with the cyanotic patient who has been thrown into *circulatory failure* by the over-zealous transfusion of whole blood without regard to the patient's cardiac reserve. The judicious use of red cells from which the plasma has been removed can be put to great advantage in the management of patients requiring red cell replacement but whose circulatory system could be overtaxed by the added fluid in the form of plasma. Frequent measurement of the venous pressure during the administration of blood to an elderly patient with severe anemia and heart disease will often warn the physician of impending circulatory overload.

Many transfusion reactions take the form of *fever, chills, bleeding manifestations, urticaria* and, occasionally, *death* from sepsis. Blood which has been collected or stored improperly may be contaminated with organisms which, when transfused into a recipient, may result in death, even though the blood appears to be perfectly normal when inspected prior to its infusion. It is also recognized that recipients of transfusions may become sensitized to the platelets or leukocytes in the donor blood; this may be associated with severe and deleterious effects upon the patient.

The common denominator in all *hemolytic transfusion reactions* consists of incompatibility between the donor and recipient's blood. Either the donor's erythrocytes may be hemolyzed by antibodies in the recipient's serum or the red cells of the recipient may be destroyed by antibodies present in the donor's serum. The former mechanism or "major" reaction is by far the most important. Hemolytic reactions may be caused by antibodies involving the ABO system, the Rh system, and also such blood groups as Lewis, Kell, Duffy, etc. When it is realized that with the blood typing sera so far available it should be possible to subdivide human beings into well over 600,000 blood types, the most common of which would occur perhaps once in every 200 typings, it is obvious that practically all transfusions are potentially sensitizing ones. Although one cannot, therefore, prevent minor incompatibilities in transfusions, fortunately one is able to use serologic technics which will alleviate the possibility of reactions occurring as the result of the presence of preexisting antibodies in either the patient or recipient. The technical aspect of this subject is beyond the scope of this presentation, but with proper blood banking technic it is fair to say that within the limits of reason incompatible hemolytic transfusion reactions are wholly preventable and inexcusable.

Serum hepatitis may develop in a recipient as a result of the transmission of the virus in the transfused whole blood or plasma. This problem is one which is an inherent risk in any transfusion and it has been estimated that the virus is present in as great a frequency as 1 in every 200 units of whole blood. Fortunately the problem of transmission of hepatitis following the administration of pooled plasma seems to have been successfully handled by the prior storage of such plasma at 32° Centigrade for a period of six months. It must be emphasized, however, that this risk remains potential in the transfusion of any blood component which has not been so treated or fractionated.

Excessive iron deposition in tissues often results from multiple transfusions. Unfortunately, *transfusion hemosiderosis* may not be avoidable since many patients with bone marrow failure depend upon transfused blood for the maintenance of their existence, being unable to manufacture their own red cells. Again, however, it should be emphasized that unless transfusions are specifically indicated, their avoidance will help to decrease the incidence of hemosiderosis with its attendant liver and cardiac complications.

Another transfusion hazard is the development of *transfusion polycythemia*. This happens in the patient who has been given so-called tonic or "cosmetic" transfusions in order to make his physician feel better but which have nothing but an adverse effect upon the recipient. The use of single blood transfusions to bolster a hemoglobin level which is at the lower limits of normal to a level which is perhaps 1 gm. per cent higher cannot be criticized too vigorously. It must always be remembered that a patient with a debilitating disease who is confined to bed or who is in a program of restricted activity does not necessarily require a hemoglobin level which is expected in the normal healthy young adult. It is a reasonable edict that when a patient requires only one transfusion as part of the medical treatment of his disease, he probably would get along better without any blood administration. Exceptions to this, such as in the management of severely anemic patients with pernicious anemia, are rare. The injudicious use of whole blood or blood component therapy to patients with far advanced malignant disease or with anemias which can and should be treated more physiologically with other therapy such as iron or vitamin B_{12} is fraught with danger to the patient and is indicative of superficial and improper medical care. The masking of an underlying anemia by transfused blood often delays or makes accurate diagnosis impossible.

A recent survey was carried out at a hospital in the United States in which it was determined that the average hemoglobin level of patients admitted to this general hospital was approximately 12 gms. per 100 ml. During this time an average of 400 units of blood were issued by the hospital blood bank every month. This hospital subsequently standardized its technic of hemoglobin determination with the cyanmethemoglobin method, and this more accurate technic indicated that the true average hemoglobin was approximately 13.5 gm. per 100 ml. in the general hospital population. Coincident with this increased accuracy of hemoglobin measurement, the hospital blood bank subsequently issued an average of approximately 300 units of whole blood per month. Since it can be assumed that there was no change in surgical requirement during this period, a logical conclusion would seem to be that approximately 25 per cent of the transfusions were being administered in this hospital to give a tonic boost to the patients in an attempt to raise the hemoglobin level approximately 1.5 gms. per cent.

RECENT DEVELOPMENTS IN BLOOD BANKING

The use of plastic equipment has provided a means of enhancing preservation of the formed elements of blood during storage and new refinements in solutions such as the use of E.D.T.A., phosphate buffer and magnesium salts have extended the period of safe shelf-life of bank blood. The ready availability of blood has enabled the use of extra-corporeal circulation in open heart surgery but the problem of adequate supply of donors is one which can not be solved readily. Whether the technic of freezing whole blood for a matter of years will prove practical remains to be seen.

Refinements of serologic methods for the detection of incompatibility using the Coombs and other technics have resulted in a significant decrease in transfusion reactions. The recognition of the possible role of the buffy coat in febrile responses to whole blood has enabled proper precautionary steps to avoid such dangers. The value of the exchange transfusion in the management of hemolytic disease of the newborn infant cannot be overestimated and the use of plasma fractions has

Narcotic Antagonists

Clinical Application With Actions, Indications, Limitations Contraindications and Dosages

WILLIAM T. GRIFFIN, M.D., AND PHILIP HITCHCOCK, M.D., *Columbia*

THE UNDESIRABLE and depressant effects of narcotics have been known since their introduction in clinical medicine. It has been only since 1915 that drugs known to be capable of preventing or abolishing the respiratory depressant actions of narcotics have been available. In 1943, a proven narcotic antagonist was made available. The antagonist introduced the problems of antagonist toxicity as well as the actions of the antagonist when used in the patient who has not received narcotics and in the narcotic addict.

The two most effective narcotic antagonists are N-allynormorphine (Nalline®) (Nalorphine) and 2-3-hydroxy-N-allymorphinan (Levallorphan) (Lorfan®). Nalorphine is a semisynthetic congener of morphine which differs only by replacement of the methyl radical attached to the nitrogen of the ethenamine chain by an allyl group. Its morphine antagonistic properties were described by Unna in 1943.

The pharmacologic actions depend on whether the patient has or has not previously received a narcotic. In the person who has not received a narcotic, the actions of Nalorphine resemble those of morphine, but are less intense and euphoria is replaced by dysphoria. The actions are: miosis, lower body temperature, decrease in cardiac rate, sweating, pallor, pseudoptosis, occasionally nausea and vomiting and, more rarely, pruritus. The systemic blood pressure is not significantly altered. There is a moderate reduction of minute volume without a change in respiratory rate. Small doses cause drowsiness and dysphoria. There may be dizziness and subjective difficulty in walking. Visual hallucinations and disturbing daydreams are prominent complaints.

Dysphoria, analgesia and respiratory depression increase with increasing doses. Unlike most narcotics, which show a plateau in the analgesia—dose curve—nalorphine seems to continue to produce further analgesia with increasing doses. The dysphoria is so acute that this is not a useful analgesic. As the dose of nalorphine is increased, the dysphoria becomes more marked.

The most significant property of nalorphine is its ability to abolish many of the effects of morphine, its congeners and synthetic narcotics. The narcotic induced euphoria, drowsiness, respiratory depression, bradycardia, hypothermia, miosis and hyperglycemia are quickly abolished. If the blood pressure is low, it will usually return to normal. Respiratory rate and minute volume are quickly returned to the normal range of values. There is no marked reduction in the analgesia. There may be some awakening, but this is not sustained. The effective antagonism of the respiratory depression lasts for from two to three hours. Nalorphine is not addicting. The actions of apomorphine and the respiratory depression of ether, cyclopropane or the barbiturates are not antagonized.

CLINICAL USES OF NALORPHINE

In the treatment of marked respiratory depression in narcotic treated parturients, there are no untoward effects on uterine tone, the progress of labor or postpartum events. The effect of Nalorphine is less prominent or absent if the patient has respiratory depression following an overdosage of a barbiturate or a general anesthetic.

Nalorphine is effective in the management of respiratory depression, in infants born of narcotic sedated mothers. If the infant is depressed, 0.1 to 0.2 mg. or nalorphine injected into the umbilical vein is effective. Depression may be prevented by the intravenous administration of 5 to 10 mg. of the drug to the mother a few minutes prior to

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Blood Transfusions—Continued

provided the physician with invaluable therapeutic tools.

It must be urged, however, that blood or blood derivatives be used only after careful insight and medical judgment have shown that a specific indication exists. Blood cannot be considered a medication simply to be requisitioned from Central Supply but, rather, it is a priceless natural substance for which there is no substitute and yet which must be treated with the utmost respect. Recognition of the uses and abuses of transfusion therapy will place its therapeutic role in the proper perspective.

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delivery. It should be remembered that prevention of respiratory depression of the infant by avoidance of overdosage of the parturient is better practice.

Nalorphine may be used for the treatment of morphine induced biliary spasm. This occasionally may be of value in differentiation of morphine-induced spasm from myocardial infarction which the spasm may simulate.

In the treatment of acute poisoning from morphine, its congeners and synthetic narcotics, the results are dramatic. Respiration returns to normal within three to four minutes, and hypotension, if present, is improved. The adult dose is 5 to 10 mg. intravenously. If pulmonary function is not adequate within ten to fifteen minutes, the initial dose should be repeated. It may be necessary to repeat the nalorphine every three to four hours, or until the effect of the narcotic has been dissipated. The narcotic antagonist does not obviate the usual supportive therapy for the acutely poisoned patient. If improvement does not occur immediately, the physician should critically reexamine the diagnosis of acute narcotic poisoning. It is *not* recommended that these drugs be used as diagnostic aids. The added respiratory depression which they cause in patients whose coma is not due to narcotics may gravely prejudice the prognosis.

In the treatment of respiratory depression in the patient who has received too large a dose of a narcotic as a preoperative medication, results are prompt and adequate.

In the rapid diagnosis of narcotic addiction, the use of nalorphine must be undertaken with much caution. This is because of the serious medicolegal implications, and the extremely severe withdrawal symptoms which will be produced. The withdrawal symptoms will begin immediately and all the symptoms will occur within a matter of hours instead of days. Also, once the withdrawal symptoms have been induced, they cannot be stopped by morphine administration until the nalorphine has been metabolised. Debilitated addicts might not survive such an ordeal. The failure of nalorphine to produce withdrawal symptoms does not prove that the person is not taking small quantities of narcotics.

Levallorphan is not a narcotic but is a synthetic substance which is not derived from opium. It will not induce or support narcotic addiction. The uses and actions of this drug are the same as nalorphine. It is ten times as potent, so that the usual adult dose is 0.5 to 1.0 mg. and the infant dose 0.02 to 0.05 mg. With such doses, narcotic induced depression is quickly reversed. Both drugs require larger doses to antagonize the analgesic effects than the depression of respiration.

A major problem in the usage of levallorphan is the close similarity of its official name to levorphan (Dromoran), a potent synthetic narcotic. Thus, it would not be difficult to request levallorphan and have levorphan administered with, perhaps, disastrous results.

Like nalorphine, levallorphan is not effective against respiratory depression due to non-narcotic drugs or pathologic conditions. In large doses, levallorphan will produce respiratory depression. Also, in the addict, levallorphan produces severe withdrawal symptoms.

SUMMARY

Nalorphine and levallorphan are specific and potent narcotic antagonists. Dramatic results are usually obtained within one to five minutes. If results are not obtained quickly, the physician should reconsider his diagnosis rather than repeat the antagonist. The antagonists are not effective against respiratory depression from causes other than narcotics. The actions of the usual analgesic doses of narcotics are antagonized by 5 to 10 mg. of nalorphine or 0.5 to 1.0 mg. of levallorphan given intravenously. Neither nalorphine or levallorphan induce or support narcotic addiction.

University of Missouri Medical Center

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CANCER TOLL

Cancer caused more than 250,000 deaths in 1958, mainly in the middle and older years but included some 4,000 children under the age of 15 years. The death rate is now higher among males than females, also among nonwhites than whites, and is highest in the northeastern part of the United States. While the mortality from cancer is rising, the prognosis for cancer patients is much better today than formerly as many forms of the disease previously incurable can now be treated. The death rate for cancer has risen from seventh place in 1900 to second place in 1938, and has remained at that level ever since.

Case Report

Lingual Goiter

A. W. ROBINSON, M.D.; J. H. GASKINS, M.D.; A. V. ARMS, M.D., AND M. DODGE, M.D.
Kansas City

Two CASES of lingual goiter, a rare clinical phenomenon, are presented with successful surgical removal.[1, 2, 3, 4]

REPORTS OF CASES

Case 1. The patient, a 12 year old girl, had noted a small tumor mass at the base of the tongue, getting progressively larger for a period of six years. Approximately one year prior to examination she experienced difficulty in breathing when reclining on her back. In addition, she noted occasional dysphagia with solid foods. For a period of two months she demonstrated a marked gagging reflex when attempting to drink fluids.

Physical examination revealed a pre-adolescent girl who appeared to be in good health. Examination of the mouth showed a midline tumor at the base of the tongue barely visible (see fig. 1). The tumor was red and had a vascular appearance. On palpation it appeared to be a sessile, well circumscribed, nontender, fairly firm mass projecting from the midline base of the tongue in the area of the foramen caecum. Examination otherwise was normal. Laboratory examination including urinalysis and serology were essentially normal.

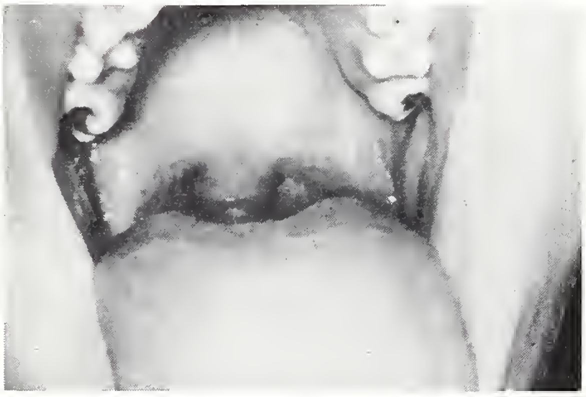

Fig. 1. Midline lingual goiter at the base of the tongue.

At operation the tumor mass was freed from its position deep in the pharynx and a towel clip placed around the pedicle of the tumor. The tumor was dissected starting posteriorly and moving anteriorly and removed intact. The tumor mass measured approximately 3 cm. in its greatest diameter (see fig. 2). Microscopic section revealed a mass of thyroid tissue with large acini and low cuboidal epithelium. Abundant colloid material was present.

A follow-up report from her home physician two months postoperatively related that the patient was complaining of fatigue and cold intolerance and that her basal metabolic rate was recorded at -28. Thyroxin was instituted. Unfortunately no further information could be obtained.

Case 2. The patient, a 35 year old white female, had been in good health all of her life except for mild lymphedema praecox of both lower extremities present for twenty years. On October 24, 1956, she complained of a recurrent constricting sensation in her throat of approximately one year's duration. In the last month she had noted occasional dysphagia and, more recently, had experienced difficulty with phonation, particularly in attaining high notes as a singer.

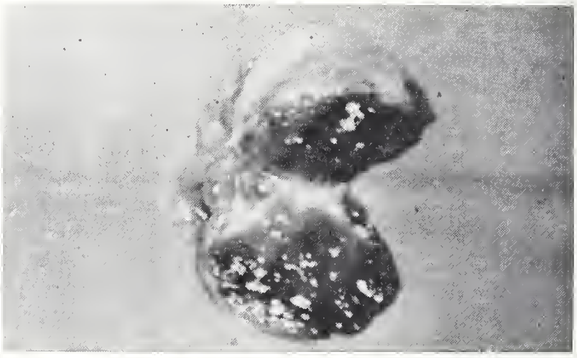

Fig. 2. Section through excised lingual goiter.

Physical examination revealed a firm, salmon-colored, irregular nodular tumor about 2 cm. in diameter located at the posterior one third of the tongue between the foramen caecum and the epiglottis. Laboratory studies including blood studies, urinalysis, fasting blood sugar, nonprotein nitrogen, blood cholesterol and blood serologic test for syphilis were all within normal limits. A basal metabolic rate of -4 was recorded. An I-131 study on October 25, 1956, revealed a 27 per cent uptake with the lingual portion predominately more active than the cervical portion of the thyroid gland.

The patient was hospitalized and, on November 6, 1956, the thyroid tumor at the base of the tongue was removed surgically. This was accomplished by a linear horizontal incision superior to the cricoid cartilage and blunt finger dissection of the tumor tissue. The tumor mass weighed approximately 10 grams and revealed on histologic section numerus colloid bearing follicles lined with flattened or low cuboid epithelium.

The patient underwent a normal postoperative recovery and returned to her job as a secretary in December 1956. However, she complained of exhaustion and

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From the Department of Medicine and Surgery, St. Luke's Hospital, Kansas City, Mo.

generalized muscular aching. An I-131 study on December 27, 1956, revealed 14 per cent uptake with approximately two thirds of the iodine uptake still appearing in the sublingual area. Follow-up examination on January 30, 1957, found the patient complaining of cold intolerance, dryness of the skin, loss of energy, drowsiness, mild dyspnea and mild dysphagia with a sensation of pressure in the throat. Typical myxedematous reflexes were elicited. An I-131 study at that time again revealed 14 per cent uptake. Because of the clinical evidence of hypothyroidism, Proloid grains 1 daily was instituted.

She was examined again on Febuary 27, 1957, at which time her disagreeable symptoms and signs had abated and she was feeling well.

DISCUSSION

The term, lingual goiter, should be reserved for hypertrophic thyroid tissue at the base of or within the substance of the tongue. The usual lingual thyroid occupies the median line at the base of the tongue between the foramen caecum and the epiglottis and presents a circumscribed rounded mass, firm or soft, elastic, nontender, and red in color with a varying degree of vascularity. It may be large enough to occupy almost the entire pharynx or it may appear as a small island projecting upward at the base of the tongue.

The primary symptoms of a lingual goiter are those of dysphonia, dyspnea or dysphagia. On the other hand, the lingual mass may be asymptomatic or give only the sensation of a lump or tightness in the throat. Hemorrhage may occur occasionally due to the abundant vascularization of the gland.

The diagnosis should be suspected when a mass can be visualized or palpated at the base of the tongue. In the differential diagnosis the following lesions should be considered: thyroglossal duct cyst, dermoid cyst, Hodgkin's disease, lymphosarcoma, carcinoma, lipoma, hygroma, fibroma, angioma, lingual tonsil hypertrophy, papilloma.

Now, with the aid of radioactive iodine, the problem of a lingual mass has been simplified so that a definite diagnostic and therapeutic program can be carried out with assurance.[5] Radioactive iodine, readily concentrated in thyroid tissue, quickly determines activity in the unknown nodule and in the region of the usual area of the thyroid gland. The use of radioactive iodine obviates the necessity of biopsy.

The choice of therapy is limited to surgery or obliteration with radioactive iodine. Certainly a small lingual goiter which is asymptomatic could be followed over a long period of time without definitive therapy. Malignancy of lingual thyroid has been reported in only a few instances.[6] Only when symptoms become disagreeable need definitive therapy be instituted. Surgical removal is not a difficult technical procedure and can be done by either the oral or submandibular route. Unusually large tumors are handled more efficiently from the extraoral approach.

Resection of the lingual thyroid will result in hypothyroidism in approximately 70 per cent of the patients.[7] With the use of radioactive iodine one should be able to predict which cases will become myxedematous and, in the instance where all thyroid tissue is found in the lingual area, a subtotal thyroidectomy could be done. If hypothyroidism occurs it can be managed easily with thyroxin.

Several cases have been reported using radioactive iodine in the treatment of lingual goiter with good results.[3, 8, 9] In each instance gradual diminution of the size of the gland and abatement of symptoms ensued. Timmons has reported the successful use of radioactive iodine therapy in the case of two sibling infants with remarkable results.[8] Schilling treated a 30 year old white woman quite successfully.[3] Of course, with the use of this potent radioactive weapon, one must assume the yet unproved hazards of carcinogenic and mutational effects.

Surgery was highly successful in the two cases described in this paper. In both instances signs and symptoms of hypothyroidism appeared postoperatively requiring thyroxin therapy.

SUMMARY

Two cases of lingual goiter are reported requiring surgical removal with the subsequent appearance of hypothyroidism.

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MSM 101st Annual Session

Hotel Muehlebach, Kansas City

April 5, 6, 7, 8, 1959

Special Article

Committee on Maternal Welfare Fourth Annual Report

(Fiscal 1956-1957)

A. C. TRUEBLOOD, JR., M.D., *St. Louis*

In 1950, a pilot study program to analyze maternal deaths was begun in St. Louis, and by the end of 1953 this study had been broadened to include the entire State of Missouri. The state was divided geographically into an Eastern and Western Section, and the Maternal Welfare Committees of the St. Louis and Kansas City Gynecological societies undertook to review maternal deaths occurring in their respective sections. This fourth annual report of the state-wide Committee on Maternal Welfare perhaps merits a gross statistical evaluation of accumulated knowledge over these last four years. Much internal reorganization, clarification and standardization of definitions and attitudes have marked the efforts of committee members over the years in achieving the present degree of functional efficiency of the Committee on Maternal Welfare. One might consider these years as representing the era of "growing pains," but the youthful study is rapidly maturing and begins to speak in coherent and significant phrases.

In 1957, the Committee on Maternal and Child Care of the A.M.A.'s Council on Medical Service, recognizing the need for standardization of terminology, published "A Guide for Maternal Death Studies" in an effort to coordinate the statistical reporting procedures of the many different state and local maternal welfare committees throughout the country and to thus give meaning to the knowledge derived therefrom. This well organized "Guide" was gratefully received and accepted by the committee and now forms the basis of present and future reports. Essentially, the general format had already been followed in Missouri, but in a few areas the changes in definitions may warrant comment here:

1. A "maternal death" is now defined as *"the death of any woman dying of any cause whatsoever while pregnant or within 90 days of the termination of the pregnancy, irrespective of the duration of the pregnancy at the time of the termination or the method by which it was terminated."* By previous definition, a death was considered maternal up to six months after termination of the pregnancy. This change in definition has had essentially no effect on the statistical value of previously published reports by this Committee since deaths have rarely come to the attention of the Committee beyond the 90-day limitations now suggested.

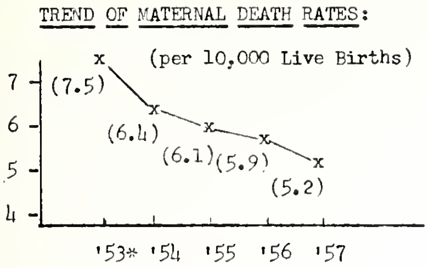
2. In the reevaluation of the term "obstetric death," consideration is now limited to those cases in which pregnancy was *directly* related to the death. In the past, this Committee had included occasional significant cases in which pregnancy was indirectly related as well, but again this change is of little statistical significance in its reflection on previously published data.

3. The Committee was pleased to note a national recognition of an attitude long held in Missouri, namely an emphasis placed on "avoidable factors" rather than on "preventability" in the evaluation of cases. We have long felt that the label "preventable" bears an antagonistic connotation to the medical profession in its arbitrary sound, and might actually thus tend to defeat the very purpose of the study program. An academic evaluation of avoidable factors should stand on its own merit. As facts and comments are passed on from the Committee to the profession as a whole, in such reports as this, no apologies or pressures should be necessary. The thoughtful physician will consider carefully the findings and recommendations, will interpret them for himself in the management of his own obstetric cases, and will thus have gained, as every member of the Committee has gained, the true value from the study program.

During the fiscal year from November 1, 1956, through October 31, 1957, 54 cases of maternal death came to the attention of the Committee; 35 from Eastern Missouri and 19 from Western Missouri. This figure excludes cases under the management of osteopaths, who are in the process now of organizing a similar study program within their own ranks. A few cases have undoubtedly escaped the Committee's attention when the death certificate failed to indicate a relationship to pregnancy, and were thus missed in the screening process by the Bureau of Vital Statistics. During this fiscal year, there were 103,151 live births recorded in the State of Missouri. Calculation of the maternal death rate for fiscal 1956-1957 produces a new low figure of 5.2 per 10,000 live births, and represents a continuing drop over the past years, as evidenced in figure 1.

Henceforth, however, in order to conform with

Chairman, Maternal Welfare Committee, Eastern Section.
Presented at the 100th Annual Session, Missouri State Medical Association, St. Louis, April 15, 1958.



*1949-1953 Average: Mo. State Dept. of Public Health

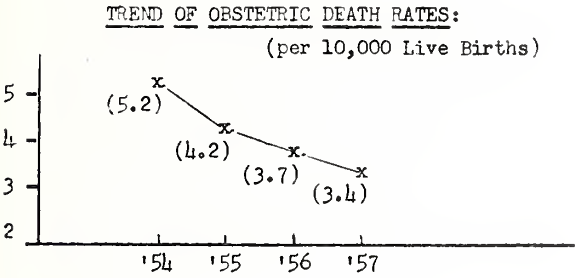
the A.M.A.'s suggested standards in reporting, the gross maternal death rate will no longer be a matter of major concern, but statistics will be corrected to reflect the obstetric death rate. Herein lies the greatest challenge to the obstetrician and truly reflects the potential dangers of pregnancy which we may strive to overcome.

Correcting the maternal death rate for fiscal 1956-1957, the 54 maternal deaths were classified as indicated in table 1. This classification was enhanced by a 74 per cent autopsy rate. Calculation of 35 obstetric deaths in 103,151 live births gives a corrected or OBSTETRIC DEATH RATE of 3.4 per 10,000 live births for the fiscal year 1956-1957. Correlation of this with data reported in previous years, corrected as indicated, reveals a similar steady reduction in the obstetric death rate in Missouri, as graphically shown in figure 2.

TABLE 1

CLASSIFICATION OF MATERNAL DEATHS

Cause of Death Unknown	3
Nonobstetric Deaths	16
Obstetric Deaths	35
Total Maternal Deaths (fiscal 1956-1957)	54



It is heartening to note this steady decline in the obstetric death rate during the last few years, despite an increasing birth rate in the state as well as more accurate and complete reporting of cases to the analyzing committees. We can only hope that the existence of an active Committee on Maternal Welfare and the heeding of its findings may have been instrumental at least to some degree in this decrease.

The 16 maternal deaths classified in table 1 as non-obstetric deaths included such causes as pulmonary emboli originating in non-pregnancy-related conditions; brain tumor (malignant glioma); spontaneous subarachnoid hemorrhage; poliomyelitis; acute monocytic leukemia; third-degree accidental burns, and chronic meningitis. One case so classified is of particular interest in that the patient died of serum hepatitis several months after having received fibrinogen for intra-partum hemorrhage with afibrinogenemia.

Because our primary interest, as obstetricians, lies in those cases classified as obstetric deaths, critical analysis of these cases may shed light on the pitfalls to be avoided in the practice of obstetrics. Table 2 demonstrates the further breakdown in this category into obstetric deaths with avoidable factors and non-avoidable obstetric deaths.

TABLE 2

CLASSIFICATION OF OBSTETRIC DEATHS

Non-Avoidable Obstetric Deaths	6
Deaths With Avoidable Factors	29
Total Obstetric Deaths (fiscal 1956-1957)	35

It will be noted that six of the 35 obstetric deaths were considered, after careful analysis, to have specific characteristics which the Committee felt could not realistically be considered avoidable. Two of these non-avoidable deaths involved massive intracranial hemorrhage associated with rapidly-fulminating eclampsia; one was a case of rapidly-fatal hemorrhage and shock when a previous cesarian section scar ruptured without warning at 7 months gestation; the other three cases involved pulmonary emboli so massive and fulminating that no preventive or defense measures seemed logical.

Table 3 indicates the causes of death, as determined by analysis, of the 29 obstetric deaths with avoidable factors.

TABLE 3

CAUSES OF OBSTETRIC DEATHS
WITH AVOIDABLE FACTORS

Hemorrhage	11	(38.0%)
Toxemia	5	(17.2%)
Infection	3	(10.3%)
Anesthesia	6	(20.7%)
Miscellaneous Causes	4	(13.8%)
Total Cases (fiscal 1956-1957)	29	(100%)

Again, as in years past, hemorrhage predominates as the greatest scourge of the obstetric patient in Missouri. However, a statistical drop from 64 per cent of the total in 1955-1956, to 38 per cent in the present fiscal years is heartening. These deaths from hemorrhage include premature placental separation and abruption; retained placenta; ruptured uterus; afibrinogenemia, and criminal abortion. There is a rise in deaths from toxemia, as might have been predicted after last year's virtual absence of this condition from the statistics. Infection, despite modern antibiosis, still plays a significant role in maternal mortality, emphasizing that human failing of complacency that so frequently seems to follow the discovery of specific therapeutic measures in the field of medicine. The most surprising factor noted this year is the relatively large number of deaths in which anesthesia played an adverse role. It might be noted that three of these six cases were related to an overdosage, both in amount and concentration, of local -caine derivatives; the other three cases involved injudicious use of other anesthetic agents (e.g. ether in the face of obvious pneumonia; nitrous oxide with insufficient oxygen administration, and improperly administered sodium pentothal). The miscellaneous causes included renal failure from an incompatible transfusion; acute pulmonary edema; pulmonary embolus secondary to criminal abortion, and amniotic fluid embolus following an uncontrolled tumultuous labor. This list of causes of obstetric deaths reveals little that is new. Rarely do these deaths reflect obscure or complex problems. Unfortunately, most of the women who die in childbirth are lost because some simple, well-known, but momentarily forgotten sign was overlooked, unprepared for or ignored. It is here that physicians must remain constantly alert, reviewing as well as renewing knowledge.

The age and parity incidence of obstetric deaths shows little of statistical significance. Twenty-four cases (roughly two thirds of the total) were under 35 years of age; eleven cases (roughly one third of the total) were over 35 years. This probably agrees generally with the incidence of pregnancy in these age brackets. The parity incidence follows a normal distribution curve: roughly one fourth of the deaths occurred in primiparae; another one fourth occurred in "grand-multiparae" (over 5 children), and the remaining one half of the deaths fell in between.

The racial incidence of obstetric deaths in Missouri, however, would seem significant. The study includes 24 Caucasian women and 11 Negroes. In Missouri, Negro births comprise about 12 per cent of the total live births recorded. Where one might expect only four obstetric deaths among women of the Negro race, the current incidence is almost three times that anticipated for Negroes. It is difficult to distinguish here whether economics, education or ethnics holds the answer to an unbalanced mortality rate.

Without wishing to make strong comparisons between geographical areas in the state, it is of interest to note the relative findings in the state's largest metropolitan area of "Greater St. Louis." While Metropolitan St. Louis-St. Louis County encompasses approximately one third of the population of Missouri and records 38 per cent of the live births in the state (39,283 of the 103,151 total), this Greater St. Louis Area reports 15 of the 35 obstetric deaths (43 per cent) during this fiscal year. Table 4 relates the obstetric death rate for Greater St. Louis with that of the State of Missouri.

TABLE 4

OBSTETRIC DEATH RATE: (ST. LOUIS VS. MISSOURI)

	Fiscal 1955-'56	*Fiscal 1956-'57*
Greater St. Louis	4.4	3.8
State of Missouri	3.7	3.4

While both rates have fallen again this year, this urban medical center continues to reflect more than its share of obstetric deaths. The imbalance can only partially be explained by the referral of terminal out-state cases into the University Hospitals; 42 per cent of the obstetric deaths in the state originate in Metropolitan St. Louis. To its credit, however, only 38 per cent of the deaths classified as involving "avoidable factors" originate here. Thus, correction of these statistics remove the significance of the unbalanced gross incidence. Of further interest, it might be noted that these corrected obstetric deaths occurred about equally between university-affiliated hospitals and the non-affiliated hospitals, and were dispersed among the local hospitals without any particular concentration in any one, a fact noted, incidently, throughout the entire state. It was, however, rather upsetting to note that four of the six anesthesia deaths, eight of the 11 deaths from hemorrhage, and three of the five toxemia deaths occurred in this urban medical center. The greatest single factor apparent in the area's statistical improvement during this reported fiscal year (and probably reflecting in that of the state as a whole) perhaps lies in the fact that one of the community's hospitals established a policy of correcting all cases of anemia by transfusion up to 12 gms. of hemoglobin. This hospital reported only one maternal death this year as against 12 the previous year! While this may be a drastic measure to advise universally, the results were most dramatic.

In analyzing the avoidability of obstetric deaths, the significance of the avoidable factors can only have meaning to us as obstetricians if they are correlated with the respective group which might have exercised control over those factors. We may find that the patient's own neglect of herself, whether through ignorance, superstition or carelessness, may have enhanced a fatal outcome, and from this we may assume that our medical public relations job is falling short of its mark in the state. We may find that a community or a hospital has failed to provide facilities or equipment essential to adequate obstetric care, and here correction of such deficiencies may suggest civic, public health or medical staff action. We may find that we as physicians have failed to exercise reasonable caution or judgment in the management of a case, or we may have demonstrated incompetent techniques. Occasionally, the neglect of a patient, in light of glaring signs demanding action, may suggest assignment of responsibility to the physician. It should be reiterated that these are categorical assignments from which all may learn, and are not intended to individualize any specific case. It is, of course, obvious that multiple factors may influence a single case, and all such factors are considered. There were 52 prominent avoidable factors involved in these 29 obstetric deaths. It is from the consideration of these factors that your Committee on Maternal Welfare extends its summary comments and its recommendations.

SUMMARY

A four-year comparative statistical review of maternal and obstetric death rates in Missouri is presented. A steady decline in the obstetric death rate is noted, that of the most recently calculated fiscal year (1956-1957) being 3.4 per 10,000 live births. The obstetric deaths are analyzed as to cause, age, parity, race and geographic incidence. Hemorrhage continues to lead the causes of obstetric deaths, accounting for 38 per cent, but deaths related to anesthesia present a significantly increased problem, accounting for 20 per cent during the reported year. Avoidable factors are noted and are assigned categorically to physicians, patients, hospitals and others. It appears with increasing emphasis that, while economics and ethnics continue to play major roles, education (public) and re-education (professional) remains the outstanding factors to which physicians must devote increasing time and effort to continue the downward trend of maternal deaths in Missouri.

RECOMMENDATIONS

1. Since hemorrhage and shock represent the greatest incidence of obstetric deaths, the following comments are appropriate:

(a) Recognition and adequate treatment of anemia during pregnancy may well eliminate many of the problems encountered in a maternal death study. Routine hematologic evaluation on admission to hospital has been recommended in the past, but this practice, where originally accepted, has generally deteriorated to little more than a token gesture in some hospitals. The original recommendation is reiterated.

(b) It is essential that adequate blood replacement be available at all times. It becomes the responsibility of the physician, individually and collectively as members of hospital staffs, as well as that of the hospitals and the community as a whole to see that blood is available promptly when required.

(c) Vigorous and prompt treatment of hemorrhage and shock must receive primary attention. Redundant as this recommendation may sound, apathy in this regard has been encountered, possibly because of the lack of availability of blood for replacement in some areas, or perhaps because we have never truly learned to estimate the amount of blood lost by the parturient patient.

(d) Alertness to the possibility of, recognition of, and treatment of afibrinogenemia is reiterated. Such conditions as abruptio placenta, premature separation of placenta, prolonged rupture of membranes, and precipitate labors are predisposing factors. Failure of blood to clot, or lysing of a weak clot, may be the early clue to the diagnosis, confirmed by a simple Fibrindex test. Treatment with adequately available fibrinogen is specific therapy. While there may be danger to indiscriminate treatment, it is life-saving when indicated.

(e) Occult or internal hemorrhage may be masked by the use of hypertensive agents, and the Committee, having noted a number of situations in which this masking has lent false security, advises against the use of such pressor subtances routinely.

(f) In patients who have had previous cesarian section, rupture of the uterus should be anticipated, and preparations should be made for such an eventuality (e.g. treatment of anemia during pregnancy, availability of adequate amounts of compatible blood, and instruction of patient to report early signs or symptoms). The Committee makes no suggestions as to the elective management of such cases, but deplores situations encountered in which the statistical possibility of trouble has been ignored.

2. The unusually high incidence of deaths due to anesthesia has pointed out several areas of concern:

(a) The Committee unanimously condemns the use of 2 per cent Xylocaine as a local anesthetic agent in obstetrics, having reviewed three deaths recently wherein overdosage and death thus resulted. Lesser concentrations of this preparation, however, arouse no Committee criticism.

(b) Physicians are reminded that obstetric anesthesia, while prone to be relegated to a "catch-as-catch-can" status, is potentially dangerous, and must be chosen carefully and thoughtfully for each individual case. Irritating agents in the inhalation group should be avoided in patients with respiratory disease; regional anesthetics such as spinal and caudal may be dangerous in patients with labile pressures (e.g. toxemia), particularly in dosages which may be "physiologic" to the non-pregnant patient, and in the absence of a trained anesthesiologist in attendance.

(c) The existence of anemia may enhance the danger of anesthesia.

3. A few basic suggestions concerning toxemia of pregnancy may be in order:

(a) Carefully recorded and critically evaluated prenatal data will usually warn of impending toxemia; serious concern and vigorous therapy, including early hospitalization, may prevent the ultimate development of "irreversible fulminating eclampsia" which defies salvage measures.

(b) Rapid controlled reduction of blood pressure in the markedly hypertensive toxemia patient is recommended to avoid the danger of excessive intracranial pressure and hemorrhage, a situation encountered on at least three occasions during the fiscal year of the present report.

(c) It is strongly advised that the patient's toxemia be brought under control to the point of relative stability before surgical interference with the pregnancy is attempted.

(d) One should be alert to the possible need for digitalis in the toxemic patient when an overwhelming mobilization of fluid might throw the patient into cardiac failure. This problem may also be encountered in the cardiac patient during the early puerperium when "physiologic" mobilization of fluid may over-load a compromised heart.

4. Several cases of pulmonary embolus have been encountered from many sources:

(a) There is evidence to indicate that the use of digitalis in the acute embolic state may enhance the vasospasm produced and hasten demise. Vasodilatation in the form of papaverine and atropine is encouraged as emergency therapy.

(b) A single case of fatal pulmonary embolism following prolonged traction for a "backache," indicates the dangers of complete immobilization of the pregnant woman, and the Committee cautions against this therapy when it might be avoided.

5. Certain general observations of a medical nature have arisen from the study:

(a) Where obstetric complications arise, it is prudent to seek early and competent consultation. Obstetric departments would be wise to set up the simple mechanics for such consultation service.

(b) The occasional incidence of mismatched blood again calls for constant attention to check-systems to avoid this disaster.

(c) Evidence indicates danger, both in the production of hemorrhage and rupture of the uterus, in the indiscriminate manual removal of placentas before physiologic separation is possible and in the absence of bleeding, at the same time recognizing the potential danger of prolonged retention of the placenta.

(d) A consideration of the value of valvuloplasty in the management of the pregnant rheumatic heart patient with mitral stenosis has interested the Committee and warrants further consideration in the future.

(e) Failure to keep adequate records, either in the office or in the hospital, may mask otherwise obvious complications in their incipient (and often correctable) stages. Record-keeping should not be considered merely a manual exercise to satisfy hospital accreditation bodies, but a vital aspect of direct therapy to the patient.

In closing this report, two announcements may serve to enhance the future efficiency of this study program:

1. Since the Division of Health has not yet found it possible to include a check-box on the death certificate to indicate relationship of death to pregnancy, the Committee requests assistance in informing it of cases of maternal death, either directly or by making sure that the condition of pregnancy is noted on the death certificate.

2. The Missouri State Pathology Society has volunteered the services of its members to perform, gratis, autopsies on any case of maternal death where facilities are not locally available. Needless to say, the more accurate the data, the more valid will be the maternal death study. Further information, pending the organization of these services, will be published in Missouri Medicine.

THE HEALTH OF YOUR CHILDREN

Appearing recently in the P.T.A. state publication was the following article submitted by the Missouri Division of Health:

The Division of Health of Missouri, when created, was charged with the responsibility of protecting the health of the people of this state. The intent of the Legislature was quite clear. Public health was what the name implies—the protection of the community health. This is in sharp contradistinction to the activity of the private physician who treats the individual.

Under the law the Division of Health must work to correct disease-causing conditions and attitudes which may exist in the community. We, therefore, have two broad general areas of responsibility. The first is to be found in the field of sanitation. Insanitary environmental conditions must be corrected to reduce exposure to the filth-born diseases. Our streams—where our children may play—must be sanitary, our schools and lunch rooms clean. The water, the milk, and the beverages which we and our children drink must be safe and healthy. Our foods must be inspected from their point of origin throughout their processing so that we may be certain when we buy them that they are wholesome and properly branded. We must know that our swimming pools are safe and that the simple remedies we buy for home use are what they claim to be.

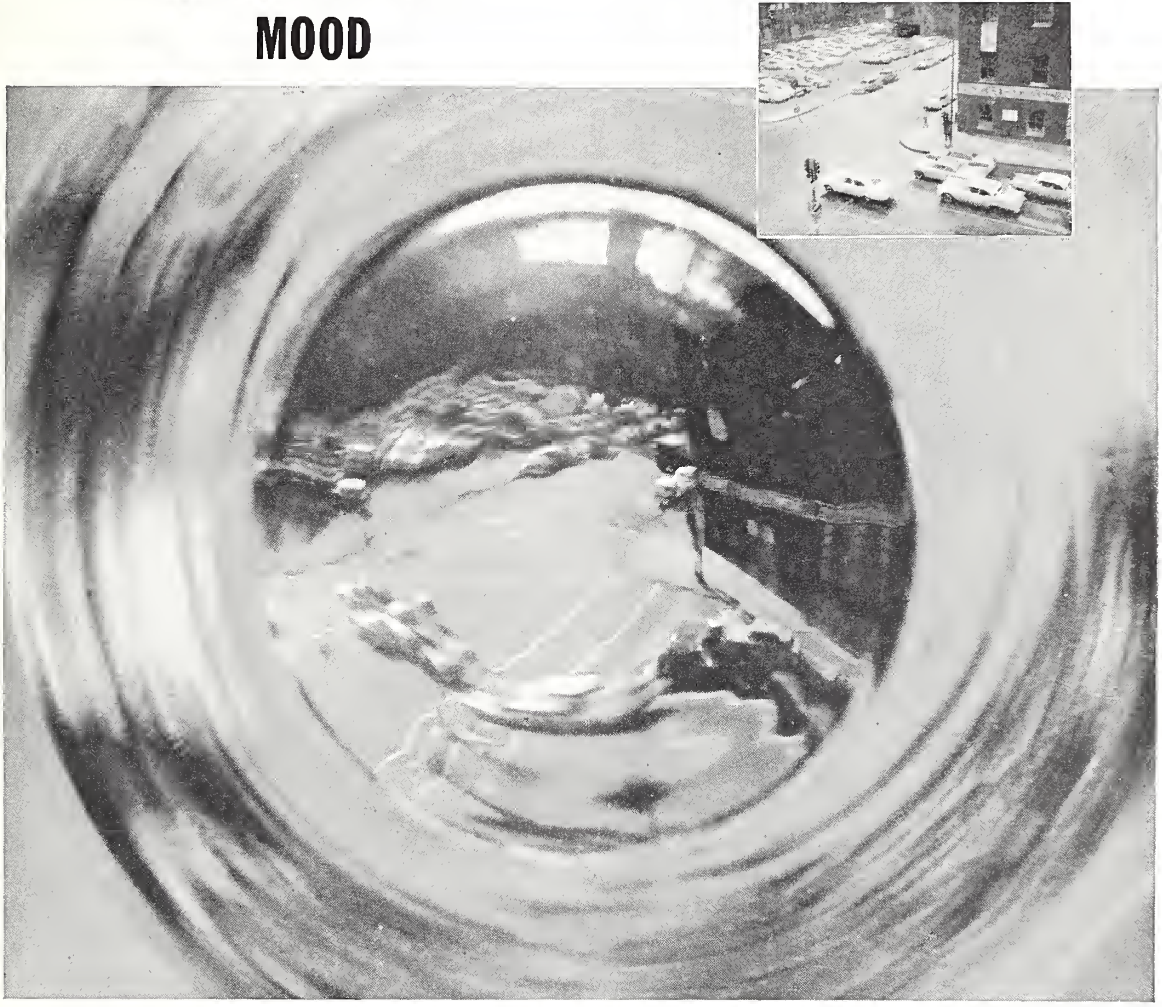
The safety and sanitation of our total environment is, therefore, legally a public health responsibility.

There is another large area within the practice of public health which is of great import but which cannot be assumed by the Division of Health alone. It must be shared by parents and teachers and other public-spirited people. This is the area of health maintainance which cannot be regulated by law. It deals with the healthy growth and development of children which requires the full understanding cooperation of parents.

There is the matter of proper diet—of exercise—

(Continued on page 420)

CONTROL
VERTIGO, DIZZINESS...
AND
ELEVATE THE
MOOD



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*Pratt, R. T. C., and McKenzie, W.: Anxiety States Following Vestibular Disorders, Lancet *2*:347 (Aug. 16) 1958.

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Research in the Service of Medicine **SEARLE**

President's Page

I would like to invite all members of MSMA to attend the 101st Annual Session, but that would be out of place for it is the meeting of each member as much as it is mine. I do urge all members to attend, however, for the meeting has much to offer them, and their help in Association work is needed.

W. F. Francka, M.D.

The program offers probably the widest range of both material and type of presentation that has ever been presented.

Each year brings its questions for the House of Delegates to deliberate and decide and this year is far from an exception. Among matters that will come before the House are free choice of physician, closed panels, corporate practice, study of redistricting the state, the single licensure bill and other legislation pending in the Missouri Legislature which will still be in session at the time of the meeting. Come and take part in the program, in the deliberations of the reference committees of the House. Talk with your delegate before the session, then give the delegates support during the session.

WF Francka

EDITORIALS

Free Choice of Physician

The work of the House of Delegates usually is principally concerned with medicine in Missouri. This year will be no exception in that most of the matters discussed at the House will concern Missouri physicians essentially. However, one matter to come before the House is a direct request from the House of Delegates of the American Medical Association.

Free choice of physician and closed panel systems were subjects of much discussion at the December Clinical Session of the American Medical Association. The discussion arose from the report of the A.M.A.'s Commission on Medical Care Plans, regarding the present attitudes of the medical profession throughout the country toward free choice of physician and closed panel systems. The A.M.A. has asked all state medical associations to offer opinions on those topics prior to the June A.M.A. session.

That a statement might be forthcoming and that Missouri delegates to the A.M.A. may be informed of the feeling of physicians in Missouri, the question will be placed on the agenda of the House of Delegates of MSMA by the Council.

The following statement was adopted by the A.M.A. House of Delegates: "We respectfully suggest to the constituent associations reviewing the report in the interim, that their attitude regarding the report will be clarified if they arrive at some decisions in regard to the following basic points:

"1. Free Choice of Physician.—Acknowledging the importance of free choice of physician, is this concept to be considered a fundamental principle, incontrovertible, unalterable, and essential to good medical care without qualification?

"2. Closed Panel Systems.—What is or will be your attitude regarding physician participation in those systems of medical care which restrict free choice of physician?

"These suggestions acknowledge that the policy of the American Medical Association to encourage and support the highest quality of medical care for all patients remains unchanged. They question, however, whether attitudes toward the free choice of physician and the closed panel system may be undergoing evolutionary change."

The 15 member Commission on Medical Care Plans of the A.M.A. was appointed by the Board of Trustees on November 29, 1954 to determine whether current medical care plans are effectively promoting (1) the highest quality of health services, (2) the welfare of the public and the medical profession, and (3) the ethical standards of the medical profession. The recent report was the seventh progress report made by the Commission.

The Commission reviewed three broad areas: (1) The nature and method of operation of the various types of plans through which persons receive the services of physicians. (2) The effect of these plans on the quality and quantity of medical care provided. (3) The legal and ethical status of the arrangements used by the various plans.

The Commission states that it also sought to determine: (1) What effect, if any, these plans have on the traditional patient-physician relationship. (2) Whether the introduction of a third party in this relationship tends to disturb it and to result in an inferior quality of medical care. (3) Whether there are plans in which the participating physician is violating the Principles of Medical Ethics. (4) Whether the plans will encourage the corporate practice of medicine, especially by hospitals. (5) What the proper relationship, if any, should be between the medical profession and all these third-party financial mechanisms.

In the report of the Commission to the A.M.A., it states that no attempt has been made to develop a "blueprint." Without doubt the opinions expressed by state associations will enter into any possible "blueprint" set up in the future. Therefore all members of the MSMA should be cognizant that this question will be posed to the MSMA House of Delegates that Missouri physicians may have a voice in the future trends of medical practice. Any member of the MSMA may attend the House of Delegates and may have voice in discussions at the Reference Committees of the House.

The Commission indicated the proportions of the question in saying "The medical profession is fully aware of the increasing pressures for expanded medical services at lower costs to the public. The efforts of the profession are second to no group in striving to provide medical care of the highest quality. Medicine is therefore confronted with both a challenge and an opportunity; the challenge of assuming its proper role in demonstrating that voluntary programs for medical care can narrow the remaining gaps of care and cost, and the opportunity of welcoming and encouraging experimentation by making available the counsel and leadership it is willing to assume and is capable of generating.

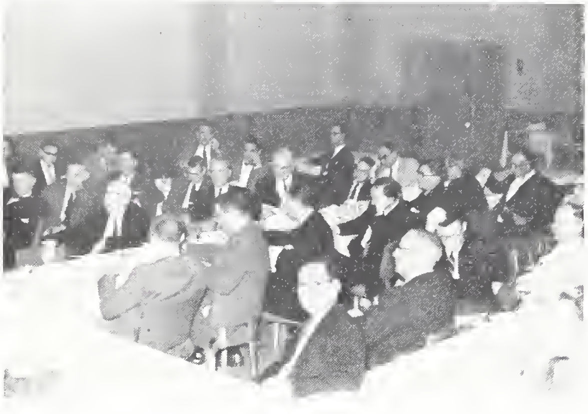
"Developments within these recent years have amply demonstrated that medicine is on the threshold of new scientific discoveries. The expanding horizons of medicine must be matched by the profession's ability to assist in making these improved standards of care available to all who would avail themselves of them."

Musings of the Field Secretary

Fifty doctors attended an evening dinner meeting of the Fifth Councilor District of the State Medical Association at the Missouri Hotel in Jefferson City, Thursday, February 26. Festivities began with an hour "bull-session" period (sometimes termed "social hour").

This particular part of the program stimulated numerous introductions of new physician members in the district. In addition I overheard two doctors enjoying talking over old times. They had interned together, had not seen each other since, yet had been practicing medicine 35 miles apart for the last five years. In another group discussion I found some displeasure with the recent policy adopted by the Missouri Division of Health, namely, that practicing physicians in this state should, when possible, make arrangements with private laboratories for their routine bacteriologic and serologic work, and discontinuing sending such laboratory specimens to the Division of Health laboratories. This particular matter is discussed more fully in the March issue of MISSOURI MEDICINE, page 244, under the title "Missouri Public Health Laboratories."

Dinner followed the hour of relaxation and ushered in a discussion period on some of the present important socio-economic aspects of medicine, along with organizational matters which will come before the House of Delegates in Kansas City at the Annual Session, April 5-8. Dr. W. F. Francka, Hannibal, President of MSMA, discussed the background and reasons for the House of Delegates, at the 1958 session, establishing a committee to study the MSMA Councilor District set-up and present representation of members in the House of Delegates. He also mentioned briefly new selective contracts which will be offered to the public by Missouri Medical Service in the near future.



The Fifth Councilor District met in Jefferson City.

Dr. John Matthews, Jefferson City, Secretary of the MSMA, discussed "Free Choice of Physicians and Closed Panel Systems." This subject was referred to each state medical association by the House of Delegates of the A.M.A. at the Interim Session in December, 1958. The matter will presumably be reconsidered by the A.M.A. House in June 1959, with the idea that various delegates will have instructions from their state associations thereto. By request of members of the audience Dr. Matthews also took time to point out the problems involved in the corporate practice of medicine (rather complex I'd say).

Dr. Francka addressed the group.

Pending legislation on health matters and the position the State Association Council has taken on these were discussed by Tom O'Brien, Executive Secretary, Missouri State Medical Association.

Following these formal presentations Dr. Byron Stuart, Boonville, Councilor of the District, and M.C., moderated a period of general discussion.

In addition to the speakers previously mentioned special guests included Dr. Ralph Perry, Kansas City, President-elect, MSMA; Dr. Victor Buhler, Kansas City, Past President, MSMA; Dr. P. V. Siegel, Smithton, President, Missouri Academy of General Practice, and Dr. C. G. Stauffacher, Sedalia, Councilor of the 6th District, MSMA.

Arrangements for the meeting were made by the host society, the Cole County Medical Society, Dr. Joseph S. Summers, Jr., Jefferson City, president, and Dr. H. O. Loyd, Jefferson City, secretary.

"Help for the Multiple Handicapped" is the theme of the 2nd Conference sponsored by the Missouri Health Council and the Nemours Foundation of Delaware. This two-day session will be held at Hotel President, Kansas City, Mo., Friday and Saturday, April 3-4, beginning at 10:00 a.m., April 3. Two tours will be conducted on Friday afternoon to present first hand observation and

(Continued on page 417)

News—Personal and Professional

"Medical Aspects of Mental Retardation" was the subject of a talk given by **Clement E Brooke,** M.D., Columbia, at a meeting of the Boone County Association for Retarded Children on January 20. The meeting was open to the public.

Gwilym S. Lodwick, M.D., Columbia, chairman of radiology at the School of Medicine, presented three papers before the Texas Radiological Society in Dallas January 29-February 1. The papers dealt with uses of radiology in cases of bone tumor, diseases of the aorta and lung cancer.

"The Normal Pre-School Child" was the subject of a talk given by **C. T. Herbert,** M.D., Cape Girardeau, at a meeting of the Lorimier Pre-School Unit of Cape Girardeau on January 19.

Vance E. Link, M.D., Independence, spoke on "Obedience to His Law" at a meeting of the South Crysler Daughters of Zion on January 27.

William J. Stewart, M.D., Columbia; **W. W. Hurst,** M.D., Joplin, and **Glenn L. McElroy,** M.D., Columbia, attended the recent meeting of the American Academy of Orthopedic Surgeons in Chicago.

R. Bruce McCloskey, M.D., Webster Groves, spoke at a meeting of the St. Louis Society of Dental Science on January 19, in St. Louis. Dr. McCloskey suggested in his talk that physicians and dentists in certain situations should consult on diagnosis and treatment.

A panel composed of **S. F. Cockerell,** M.D., **Vance E. Link,** M.D., **E. T. Moore,** M.D., and Coach Bob McHenry, all of Independence, discussed the topic "Teenage Health Problems" at a meeting of the Independence Junior High School PTA on January 13.

The directors of the Kansas City Area Council of Boy Scouts have cited **Donald H. Giesler,** M.D., Osceola, for outstanding service.

Robert E. Mack, M.D., assistant professor of medicine at St. Louis University Medical Service at the Veterans Administration Hospital, has been awarded a grant of $16,740 by the United States Public Health Service for the training of physicians in the use of radioisotopes.

Lewis Ferguson, M.D., Joplin, president of the Advisory Health Council, was a guest speaker at the Joplin branch of the American Association of University Women's luncheon meeting January 17 in the Connor Hotel.

A joint meeting of doctors and lawyers belonging to the St. Louis Medical Society and the Bar Association of St. Louis was held January 20 at the St. Louis Medical Society Auditorium, to discuss mutual problems of the two groups. The meeting featured a panel composed of Circuit Judge John K. Regan, Norris H. Allen, attorney, **E. C. Funch,** M.D., St. Louis, and **George L. Hawkins, Jr.,** M.D., St. Louis.

J. Earl Smith, M.D., St. Louis, has been appointed director of the department of health and hospitals it was announced by Mayor Raymond R. Tucker on January 14.

Robert L. Jackson, M.D., Columbia, participated in a panel discussion on the subject "Diabetes," on January 22, at a public meeting in St. Louis, sponsored by the St. Louis Diabetes Association and the St. Louis Clinical Diabetes Society.

The *Rich Hill Mining Review* on January 29 carried a picture and article about **Claude J. Allen,** M.D., Rich Hill, who had practiced for 50 years in Rich Hill and the surrounding area.

E. A. Duffy, M.D., Trenton, who has been a registered pharmacist for the past 50 years, received a gold certificate January 10 from the Missouri State Board of Pharmacy.

Richard J. Bing, M.D., St. Louis, has been named to the scientific advisory board of the Tobacco Industry Research Committee, it was announced January 19.

"Some Recent Advances in the Fight Against Diseases of the Heart and Blood Vessels" was the subject of a talk given by **Albert M. Estes,** M.D., Cape Girardeau, at the February 3 meeting of the Cape Rotary Club.

Frank R. Bradley, M.D., St. Louis, director of Barnes Hospital, has been named a life member of the American Hospital Association, a designation conferred on members of 30 years' standing.

"Every adult of age 40 or younger should receive three Salk polio injections," **Charles T. Herbert,** M.D., Cape Girardeau, told the Cape Kiwanis Club January 30 in a talk.

George Fuchs, Jr., M.D., Columbia, presented a program on "Pregnancy and Delivery" at a meeting of the Women's Auxiliary to the Missouri Student Chapter of American Veterinary Medical Association on January 26.

C. Thorpe Ray, M.D., Columbia, has been elected president of the Southern Society for Clinical Research. He was elected at the 13th annual meeting of the society in New Orleans. Dr. Ray has also been named a fellow of the New York Academy of Science.

"Changes Needed in Mental Program" was the subject of a talk given by **Alfred K. Baur,** M.D., Fulton, at the first annual mental health conference at the Central Missouri State College on February 4.

The City of Cabool named **Garrett Hogg,** M.D., "Man of the Year." At the same time the Cabool Chamber of Commerce passed a resolution recognizing all persons in the community in health work.

Mrs. Irene McCabe, St. Louis, director of public relations for Group Hospital Service, was named St. Louis Advertising Woman of the Year by the Woman's Advertising Club of St. Louis. On February 17 a Senate Resolution was passed by the Missouri Legislature felicitating Mrs. McCabe.

The next examination given by the Missouri State Board of Medical Examiners will be held May 29 and 30. All applications must be filed 30 days before the examination.

Dr. Michael L. Mason, Chicago, professor of surgery of Northwestern University School of Medicine, will present the tenth annual Dr. F. G. Thompson, Sr. Lecture on May 21 at the Thompson, Brumm, Knepper Clinic and Hospital, St. Joseph. His subject will be "Treatment of Acute Injuries to the Hand."

W. Barry Wood, Jr., M.D., Baltimore, vice president, Johns Hopkins Medical Institutions, will deliver the 9th annual Memorial Lecture at the Menorah Medical Center, Kansas City, on May 12. His subject will be "The Genesis of Fever." A dinner will precede the lecture.

NEW MEMBERS

Braverman, Abe E., M.D., 701 E. 63rd St., Kansas City. Jackson County Medical Society.

Flynn, Thomas T., M.D., 1300 Grant Rd., St. Louis 19. St. Louis County Medical Society.

Hogancamp, Charles E., M.D., 333 S. Kirkwood Rd., St. Louis 22. St. Louis County Medical Society.

Jotte, Richard F., M.D., 10300 St. Charles Rd., St. Ann. St. Louis County Medical Society.

Leo, William A., M.D., Professional Bldg., Kansas City. Jackson County Medical Society.

Lyle, Roy M., M.D., 12921 Grandview Rd., Grandview. Jackson County Medical Society.

Oakley, John E., M.D., 601 S. Brentwood Blvd., Clayton 5. St. Louis County Medical Society.

Russell, Richard L., M.D., Professional Bldg., Kansas City. Jackson County Medical Society.

Yohe, Ruth M., M.D., 1710 Independence Ave., Kansas City. Jackson County Medical Society.

DR. MURPHY HEADS MIDWEST STATES FOR AMEF

At the eighth annual American Medical Education Foundation meeting in Chicago on January 24 and 25, James P. Murphy, M.D., St. Louis, Missouri state chairman, was appointed chairman of the Midwest States division. Dr. Murphy led a discussion group of this section during the meeting in Chicago. The Midwest States section includes Ohio, Michigan, Indiana, Illinois, Oklahoma and Missouri.

PHYSICIANS HONORED BY SENATE

Gold Medal Awards of the American College of Radiology were presented to LeRoy Sante, M.D., St. Louis, and posthumously to C. Edgar Virden, M.D., Kansas City, received by his son, Herbert H. Virden, M.D., Kansas City, in Chicago on February 6.

The following resolutions were adopted by the Missouri Senate on February 19:

Senate Resolution No. 44

Whereas, The late Dr. C. Edgar Virden, of Kansas City, Missouri, was awarded posthumously the Gold

Medal award from the American College of Radiology; and

WHEREAS, The acceptance of the award was by his son, Dr. Herbert H. Virden, Kansas City, Missouri, in formal ceremonies highlighting the annual meeting of the College in Chicago, Illinois, on February 6, 1959; and

WHEREAS, The College of Radiology is a national medical group representing physicians who specialize in the use of x-ray, radium and other radioactive substances in diagnosis and the therapy of disease; and

WHEREAS, The late Dr. Virden was head of the department of radiology at St. Joseph's Hospital, Kansas City, Missouri; and

WHEREAS, With honor and distinction this leader in the field of medicine now joins such distinguished past Gold Medalists as Mme. Curie, discoverer of radium, and W. D. Coolidge, developer of the modern x-ray tube, now therefore be it

Resolved, That the members of the Senate of the 70th General Assembly go on record congratulating Dr. Herbert H. Virden on the magnificent accomplishments of his father, the late Dr. C. Edgar Virden, in the art of alleviating and treating the illness of all mankind, and be it further

Resolved, That the Secretary of the Senate be instructed to send a properly inscribed copy of this resolution to the son, Dr. Herbert H. Virden, at his home in Kansas City, Missouri.

Senate Resolution No. 45

WHEREAS, Dr. LeRoy Sante, St. Louis, Missouri, has been awarded the Gold Medal of the American College of Radiology; and

WHEREAS, The award was made at the formal ceremonies highlighting the College's annual meeting on February 6, 1959, in Chicago, Illinois; and

WHEREAS, The College of Radiology is a national medical group representing physicians who specialize in the use of x-ray, radium and other radioactive substances in the diagnosis and therapy of disease; and

WHEREAS, Dr. Sante is professor and director of the department of radiology at St. Louis University Medical School and St. Mary's Hospital Group; and

WHEREAS, The award was presented in recognition of Dr. Sante's outstanding and exceptional contributions to the College "and the profession for which it stands"; and

WHEREAS, With honor and distinction this leader in the field of medicine now joins such distinguished past Gold Medalists as Mme. Curie, discoverer of radium, and W. D. Coolidge, developer of the modern x-ray tube; now therefore be it

Resolved, That the members of the Senate of the 70th General Assembly go on record as congratulating Dr. Sante on his magnificent achievement in the art of alleviating and treating the illnesses of all mankind; and be it further

Resolved, That the Secretary of the Senate be instructed to send a properly inscribed copy of this resolution to Dr. LeRoy Sante, at his home in St. Louis, Missouri.

DEATHS

Mitchell, S. E., M.D., Malden, a graduate of St. Louis University Medical School, 1906; member of Dunklin County Medical Society; aged 86; died Feb. 4.

Holmes, Prince A., M.D., Mount Vernon, a graduate of St. Louis College of Physicians and Surgeons, 1909; member of Ozarks County Medical Society; aged 80; died February 2.

Scott, James U., M.D., Harrisonville, a graduate of Washington University Medical School, 1894; member of West Central County Medical Society; aged 86; died February 3.

Wood, Lawrence E., M.D., Kansas City, a graduate of Kansas University School of Medicine, 1926; member of Jackson County Medical Society; aged 58; died February 3.

Morris, Earl F., M.D., Nevada, a graduate of St. Louis University Medical School, 1926; member of West Central County Medical Society; aged 63; died February 4.

Stoelzle, Joseph D., M.D., St. Louis, a graduate of St. Louis University School of Medicine, 1920; member of St. Louis County Medical Society; aged 61; died February 9.

Greene, Luther D., M.D., Richmond, a graduate of University Medical College of Kansas City, 1891; member of Lafayette-Ray County Medical Society; aged 91; died February 13.

Gebert, Clara M., M.D., Valley Park, a graduate of St. Louis College of Physicians and Surgeons, 1922; member of St. Louis County Medical Society; aged 74; died February 18.

Musings of the Field Secretary

(Continued from page 414)

information as to how handicapped persons are being aided, both children and adults.

One of the tours will be to the Delano School for Exceptional Children and Goodwill Industries. The other will visit the Crippled Children Nursery School and The Rehabilitation Institute. Following a buffet dinner Friday night, Senator C. R. Hawkins, Brumley, Mo., will discuss "The Missouri State Co-ordinating Commission on the Handicapped." He serves as chairman of this commission. On Saturday morning, April 4, two forums will be held concurrently from 9:00 a.m. to 11:00 a.m. The subjects to be considered are "Problems and Needs for Children" and "The Adult Problems and Needs."

The program will be concluded by a paper on "Objectives of a Rehabilitation Program" by Dr. George G. Deaver, Medical Director, Children's Division, Institute of Physical Medicine and Rehabilitation, New York University-Bellevue Medical Center, New York.

It is hoped that many physicians will arrange to attend at least a part of this two-day session which comes just before the State Association Annual Meeting.

Councilor District News

FIRST COUNCILOR DISTRICT

DONALD M. DOWELL, CHILLICOTHE, COUNCILOR

Grand River Medical Society

The Grand River Medical Society met Thursday, February 12, at 6:00 p.m. at the Strand Hotel, Chillicothe, with the following members present: Drs. Daley, Carter, Sweiger, Fair, Cullers, Clark, Gearhart, Vandiver, Conrad, Grace, Smith, Bohnsak, Dixon, Fuson, Mandler, Platz and Howell. Some Auxiliary members, also six guests, including Dr. George Miles, Kansas City, attended.

After a fine dinner at 6:45 p.m. the Auxiliary retired to a meeting of their own and the membership was addressed by the guest speaker, Dr. George O. Miles, on the subject of "Gastric Ulcer." His talk was well illustrated by slides and x-rays, also a postoperative case was exhibited. His address was well received and an interesting discussion followed.

A short business session was held. Minutes of the previous meeting were read and approved. Delegates and alternates to the State meeting were appointed as follows:

Caldwell County, Dr. Daley, delegate, Dr. Carter, alternate; Carroll County, Dr. Platz, delegate, Dr. Allen, alternate; Livingston County, Dr. Grace, delegate, Dr. Vandiver, alternate; Grundy County, Dr. Cullers, delegate, Dr. Clark, alternate; Daviess County, Dr. Wilson, delegate, Dr. Nixon, alternate; Harrison County, Dr. Gearhart, delegate, Dr. Broyles, alternate; Linn County, Dr. Dixon, delegate, Dr. Howell, alternate; Mercer County, Dr. Bristow, delegate, Dr. Zahrt, alternate; DeKalb County, Dr. Sweiger, delegate, Dr. Johnson, alternate.

WM. A. FUSON, M.D., *Acting Secretary*

SECOND COUNCILOR DISTRICT

B. L. MURPHY, HANNIBAL, COUNCILOR

Chariton-Macon-Monroe-Randolph County Medical Society

The Chariton-Macon-Monroe-Randolph County Medical Society held its regular monthly meeting Thursday night, February 12, at the Woodland Hospital in Moberly.

Following the business meeting at which Eugene Arnold, M.D., became a member of the Society, Dr. Leonard Berg, of St. Louis, spoke on "What's New in Neurology," discussing chiefly parkinsonism, its surgical treatment and the variable results of drug therapy; and the diagnosis, prophylaxis and treatment of vascular disease of the brain.

Members present were Dr. F. L. Harms and Dr. George Hawkins, Salisbury; Dr. Donald Eggleston, Macon; Dr. F. A. Barnett, Paris; Dr. P. V. Dreyer, Huntsville; Dr. C. C. Weger, Keytesville; and Drs. Eugene Arnold, Josephine Baker, W. D. Chute, C. C. Cohrs, J. W. Fleming, Jr., T. S. Fleming, Robert Hasson, L. E. Huber, C. C. Smith, S. R. Szymanski, and R. H. Young, Moberly.

JOSEPHINE D. BAKER, M.D., *Secretary*

Marion-Ralls-Shelby Medical Society

An evening dinner meeting of the Marion-Ralls-Shelby Medical Society was held at the Mark Twain Hotel in Hannibal on Tuesday night, February 17. A social hour preceded dinner and the scientific program.

Dinner preceded the program.

Twenty-five doctors were present to hear a fine talk given by R. O. Muether, M.D., of St. Louis, on the subject, "Medical Emergencies."

Dr. Muether continues the discussion after the formal program.

Considerable general discussion of the subject followed Dr. Muether's formal presentation and continued for some time after the meeting adjourned.

John N. Walterscheid, M.D., *Secretary*

FOURTH COUNCILOR DISTRICT

J. C. CREECH, TROY, COUNCILOR

Jefferson County Medical Society

A meeting of the Jefferson County Medical Society was held Tuesday, February 24, at the Jefferson County Memorial Hospital.

The meeting was called to order at 8:30 p.m. by the president, Dr. R. H. Donnell.

Dr. James Sisk, instructor in dermatology at Washington University Medical School, gave a talk on "Some Problems in the Management of Skin Diseases." The talk was accompanied by colored slides which always seem to make a meeting more interesting.

Refreshments were served, courtesy of the Schering Corporation.

Doctors present were: Drs. Allbee, Bolgar, Harold Donnell, R. H. Donnell, T. A. Donnell, Mayfield, McKinstry, Rice, Yoskit, Sexauer, and Rutledge.

John F. Rutledge, M.D., *Secretary*

Lincoln-St. Charles Medical Society

A dinner meeting of the Lincoln-St. Charles County Medical Society was held on Tuesday night, February 17, at Station Duquette in St. Charles.

The evening festivities began with a social hour followed by dinner and then an excellent scientific program which featured a panel discussion on "Arthritis." Members of the panel were: Paul O. Hagemann, M.D., St. Louis, who discussed, "Rheumatoid Arthritis"; John J. Budd, Jr., M.D., St. Louis, discussed "Research in Rheumatoid Arthritis"; Otakar Machek, M.D., St. Louis, spoke on "Physical Medicine and Rehabilitation," and Robert W. Crossman, M.D., St. Louis, discussed, "Osteoarthritis."

There were numerous questions from the audience following the formal presentations.

Paul Rother, M.D., *Secretary*

FIFTH COUNCILOR DISTRICT

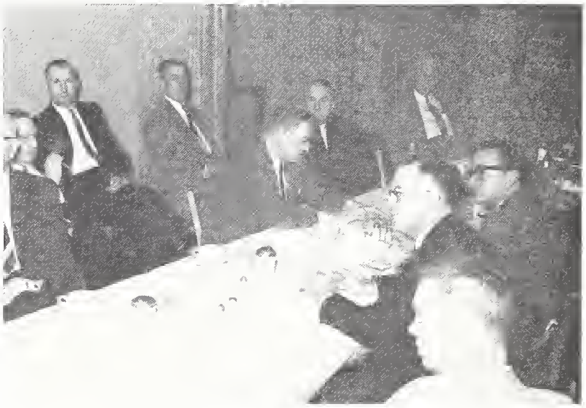
BYRON M. STUART, M.D., BOONVILLE, COUNCILOR

Audrain County Medical Society

Richard Yore, M.D., of St. Louis, presented the scientific program at a joint dinner meeting of the Audrain, Callaway and Montgomery County Medical societies, Monday night, February 16, at the Audrain County Hospital in Mexico.

Dr. Yore was the speaker.

Dr. Yore discussed "The Management of Chest Injuries." His discussion covered items of practical interest and was presented in an interesting manner.



Members remained at the table for the meeting.

Twenty physicians were present to enjoy the evening's offering.

Ernest S. Gantt, M.D., *Secretary*

SIXTH COUNCILOR DISTRICT

C. G. STAUFFACHER, M.D., SEDALIA, COUNCILOR

West Central Missouri Medical Society

A dinner meeting of the West Central Missouri Medical Society and the doctors' wives was held in Harrisonville, on Thursday night, February 12. A social hour preceded dinner and the program.

Sanford Cockerell, M.D., Independence, gave the program of the evening. He spoke on "Personality Development in Children." This was a most interesting and practical discussion of an important subject and was unusually well received by all present.

Jack Moody, M.D., *Secretary*

EIGHTH COUNCILOR DISTRICT

W. W. TILLMAN, M.D., SPRINGFIELD

Ozarks Medical Society

Thirty-nine members and guests of the Ozarks Medical Society met in Ferrell's Dinner House in Aurora on Tuesday night, February 10. Following social refreshments and dinner, an excellent program was presented by the Postgraduate Committee of the University of Missouri Medical School in cooperation with the Missouri Academy of General Practice.

This consisted of a panel discussion on the subject, "Resuscitation of Infants Following Vaginal and Caesarean Section Deliveries," by Kenneth Keown, M.D., Department of Anesthesia; J. S. Roden, M.D., Department of Obstetrics and Gynecology, and W. R. Hepner, M.D., Department of Pediatrics, all of the University of Missouri Medical School.

A period of two hours was given to this discussion which was well received and appreciated by the entire group. The presentation engendered considerable discussion from the floor.

Appreciation was given to the Society for the remembrance and members' services as pallbearers for the late Dr. P. A. Holmes.

A. J. Graves, M.D., *Secretary*

NINTH COUNCILOR DISTRICT

J. H. SUMMERS, M.D., LEBANON, COUNCILOR

Mid-Missouri County Medical Society

The Mid-Missouri County Medical Society and the doctors' wives held a dinner meeting at the Rock Court Cafe in Lebanon on Thursday night, February 12.

The scientific program for the evening was given by Joseph Summers, M.D., radiologist, of Jefferson City. Dr. Summers gave an informative discussion on "Radiation Hazards."

M. K. Underwood, M.D., *Secretary*

TENTH COUNCILOR DISTRICT

BEN M. BULL, M.D., IRONTON, COUNCILOR

Mineral Area Medical Society

William Gillespie, M.D., of St. Louis, spoke at a meeting of the Mineral Area County Medical Society on Thursday night, February 26, at the State Hospital in Farmington.

He presented in good fashion the subject, "Diagnosis and Treatment of Bronchiectasis."

George Watkins, Jr., M.D., *Secretary*

The Health of your Children

(Continued from page 410)

of fresh air. All of these are best maintained with the help and guidance of your family physician. Then, too, there is the problem of preventing the diseases of childhood which were once thought inevitable but which are now known to be preventable and to sometimes produce devastating after effects. The paralysis which may follow poliomyelitis—the lung damage which may follow whooping cough—the nerve and brain damage of tetanus—all are preventable through proper immunization. Once thousands of children died each year from diphtheria. Children need no longer die of this disease if properly immunized.

The person best equipped to advise parents and to help them protect their children is the family physician. Without him the great scientific advances of medicine are not and cannot be available to you. Make him a part of the growing up process of your children.

The Division of Health can help you in this. It will provide you with literature to help parents to understand the medical-social and psychic needs of the school and preschool child. It can assist you in holding well-baby clinics for the edification and assistance of parents. It can support you in your determination that all children be immunized and thoroughly examined by their own physician before entering school.

Personnel of the Division of Health are charged with the responsibility of following up and bringing to treatment cases of infectious diseases in your community which may threaten the health of yourself and your child. Public health nurses work closely with the family physician to achieve this goal.

Unnoticed and undetected physical handicaps and congenital deformities can best be picked up and treated in the offices of your family physician. The preschool examination is important.

The Division of Health can help you to mobilize the technical resources of the community to solve the health problems of the community, but to do a good job in this second area of responsibility, we, in public health, need your understanding cooperation.

We are working for you. Will you help us to help your children?

waterloo for an ulcer...

Napoleon exhibited ulcer symptoms through most of his adult life, yet he scorned medication for his everlasting "spasms of nervous origin." He ignored his infirmities with violent naïveté despite an intense interest in medical science. Thus, the classic hand-in-coat pose may have been the result of his paroxysms of gastric pain that sliced "like the stab of a penknife."

When your patient is besieged with an ulcer, Robins provides you with an armamentarium sufficient to repel it.

frontal assault — If your tactics dictate Local Action, try ROBALATE,® which is dihydroxy aluminum aminoacetate (0.5 Gm. per tablet or 5 cc.), an antacid of definitely superior efficacy.

encirclement — If you prefer to approach the ulcer Systemically, prescribe DONNATAL,® the anticholinergic-antispasmodic-sedative with the time-tested *natural* belladonna alkaloids and phenobarbital, a veteran campaigner without peer. FORMULA: hyoscyamine sulfate, 0.1037 mg.; atropine sulfate, 0.0194 mg.; hyoscine hydrobromide, 0.0065 mg.; and phenobarbital (1/4 gr.), 16.2 mg.

multi-pronged attack — If you relish the strategy of combining antacid and antispasmodic-anticholinergic effects, use DONNALATE.® It combines one-half of a DONNATAL tablet with one ROBALATE, ideal allies for comprehensive ulcer therapy.

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MISSOURI STATE MEDICAL ASSOCIATION

101st Annual Session

Hotel Muehlebach, Kansas City
April 5-8, 1959

TIME AND PLACE OF MEETINGS

Sunday, April 5

12:30 p.m. Registration for House of Delegates, Grand Ball Room.

1:30 p.m. House of Delegates, Colonial Ball Room.

3:30 p.m. Reference Committee Meetings, Colonial Ball Room, Rooms 362, 363, 364, 365.

7:00 p.m. Buffet Supper and Entertainment, Woman's Auxiliary, Hotel President.

Monday, April 6

8:00 a.m. Registration, Grand Ball Room.

9:00 a.m. Motion picture, Colonial Ball Room.

9:30 a.m. Scientific Session, Colonial Ball Room.

10:30 a.m. Intermission to View Exhibits, Grand Ball Room.

11:00 a.m. Scientific Session, Colonial Ball Room.

12:00 noon. Committee on Maternal Welfare Luncheon, Rooms T21-22.

2:00 p.m. Scientific Session, Colonial Ball Room.

3:00 p.m. Intermission to View Exhibits, Grand Ball Room.

3:30 p.m. Scientific Session, Colonial Ball Room.

4:30 p.m. House of Delegates, Colonial Ball Room.

5:15 p.m. Reference Committee Meetings, Colonial Ball Room, Rooms 362, 363, 364, 365.

6:30 p.m. Committee on Diabetes and Missouri Diabetes Association Dinner, Tea Room.

6:30 p.m. Missouri State Surgical Society Dinner, Kansas City Club.

Tuesday, April 7

8:00 a.m. Registration, Grand Ball Room.

9:00 a.m. Motion picture, Colonial Ball Room.

9:30 a.m. Instruction Courses, Rooms T21, T22, 362, 363, 364, 365.

10:30 a.m. Intermission to View Exhibits, Grand Ball Room.

11:00 a.m. Scientific Session, Colonial Ball Room.

12:00 noon. University of Missouri Medical Alumni Luncheon, Trianon Room.

2:00 p.m. Scientific Session, Colonial Ball Room.

3:00 p.m. Intermission to View Exhibits, Grand Ball Room.

3:30 p.m. Scientific Session, Colonial Ball Room.

7:30 p.m. Annual Banquet, Colonial Ball Room.

Wednesday, April 8

8:00 a.m. Registration, Grand Ball Room.

9:00 a.m. Motion picture, Colonial Ball Room.

9:30 a.m. Scientific Session, Colonial Ball Room.

10:30 a.m. Intermission to View Exhibits, Grand Ball Room.

11:00 a.m. Scientific Sessions, Rooms 362, 363, 364.

1:30 p.m. House of Delegates, Trianon Room.

GENERAL MEETING

Monday, April 6, 1959, Colonial Ball Room, Hotel Muehlebach

9:00 a.m. Motion picture: Dermatologic Office Procedures for the General Practitioner.

W. F. FRANCKA, M.D., Hannibal, Presiding.

9:30 a.m. Panel: Staphylococcus Infections in Hospitals.
Moderator: Ralph A. Kinsella, Sr., M.D., St. Louis.
Panelists: Clement E. Brooke, M.D., Columbia.
Harvey R. Bernard, M.D., St. Louis.
R. P. Wright, M.D., Kansas City.
Frank R. Bradley, M.D., St. Louis.

10:30 a.m. Intermission to View Exhibits, Grand Ball Room.

RALPH PERRY, M.D., Kansas City, Presiding.

11:00 a.m. Cardiac Arrhythmias, Michael Bernreiter, M.D., Kansas City.

All age groups and both sexes are equally prone to disturbances of the heart beat. Arrhythmias occur in normal as well as abnormal hearts. Irregular heart action may produce no symptoms in some patients and be the cause of great anxiety in others. These disorders may be quite harmless at times, but lead quickly to cardiac failure and death in some patients. Correct diagnosis of the type of arrhythmia is essential before proper therapy can be instituted. The final diagnosis depends on the electrocardiographic findings. A short summary of the more important disturbances of the heart beat, their diagnosis and treatment will be given. Slides demonstrating the different cardiac arrhythmias will be shown.

11:15 a.m. The Diagnosis and Management of Polycythemia, George E. Thoma, M.D., St. Louis.

A brief résumé of the salient clinical findings and significant laboratory tests are presented. These are discussed from the standpoint of the differential diagnosis of polycythemia. The general management plan of this disease is outlined. The rationale, method and efficacy of radioactive phosphorus (P-32) as the principle therapeutic agent is presented and discussed in detail.

11:30 a.m. Idiopathic Ulcerative Colitis, F. B. Campbell, M.D.; J. G. Campbell, M.D., and Joe E. Hirsch, M.D., Kansas City.

Four hundred cases of ulcerative proctitis and proctocolitis are reviewed. Ulcerative proctitis, the first stage of ulcerative colitis, is common and relatively few of the cases progress to intractable colitis. The most effective medical treatment is presented. Indications for colectomy and permanent ileostomy are listed.

11:45 a.m. Adult Diabetes Mellitus: Four Years' Experience With Oral Hypoglycemic Agents in Treatment, Norman W. Drey, M.D., St. Louis.

This presentation includes the clinical management of 66 adult diabetic patients who have been taking tolbutamide over a four-year period. The study includes clinical observation from the standpoint of diabetic control and careful observation for any toxic manifestation involving dermatologic aspects, gastrointestinal, nervous system, hematologic, hepatotoxic, and renal toxicity studies. This includes observation of needle biopsy material of the liver taken both before and during therapy. The study also includes 32 patients similarly observed on chlorproparnide.

COMMITTEE ON MATERNAL WELFARE

LUNCHEON MEETING

Monday, April 6, 1959, 12:00 noon, Rooms T21-22, Hotel Muehlebach

JOSEPH L. JOHNSTON, M.D., Springfield, Presiding

Discussion of Cases of Maternal Deaths Involving Anesthesia and Hemorrhage.
Report of the Committee on Maternal Welfare.

GENERAL MEETING

Monday, April 6, 1959, Colonial Ball Room, Hotel Muehlebach

JOHN A. GROWDON, M.D., Kansas City, Presiding.

2:00 p.m. Working Together for an Improved Missouri Mental Health Program, Addison M. Duval, M.D., Jefferson City.

In this first official address, the new Director of Missouri's Division of Mental Diseases outlines the basic objectives of a state mental health program. These are (1) to provide modern care and treatment to the mentally ill not otherwise provided, and (2) to establish a program of prevention of mental illness with its accompanying disability. The present status of the state program is presented with a description of the deficiencies and the assets which constitute the base from which a program will be planned. Both long-range and short-range plans must be formulated for proper goals to be reached. Responsibility of government—city, county and state—for its share of the mental health function must be properly assumed. The Division staff will be responsible for the leadership and organization functions in developing mental health programs, but it is believed that success cannot come without the support of organized medicine.

2:30 p.m. The Increasing Menace of Carcinoma of the Lung, Alton Ochsner, M.D., New Orleans, La.

3:00 p.m. Intermission to View Exhibits, Grand Ball Room.

3:30 p.m. Clinical Pathologic Conference.
Moderator: Ferdinand C. Helwig, M.D., Kansas City.
Panelists: Marvin F. Hall, M.D., Joplin.
Lucien W. Ide, M.D., St. Joseph.
Frederick C. Coller, M.D., Springfield.
Samuel P. W. Black, M.D., Columbia.
F. J. Dean Sauer, M.D., St. Louis.

4:30 p.m. House of Delegates, Colonial Ball Room.

INSTRUCTION COURSES

Tuesday, April 7, 1959, Hotel Muehlebach

9:00 a.m. Motion picture: Control of Severe Pain. Colonial Ball Room.

9:30 a.m. Instruction Courses.

Anesthesiology, Including Complications, Kenneth K. Keown, M.D., Columbia. Room 362.

Management of Injuries of the Back. Richard H. Kiene, M.D., Kansas City. Room 363.

Use of Diuretics, Hubert M. Parker, M.D., Kansas City. Room 364.

Diagnosis of the Acute Abdomen, Ned D. Rodes, M.D., Mexico. Room 365.

Urinary Tract Infections in Children, Eugene J. Schwartz, M.D., Springfield. Room T21.

Pelvic Pain and Hemorrhage in Women, Gerald L. Miller, M.D., Kansas City. Room T22.

10:30 a.m. Intermission to Visit Exhibits, Grand Ball Room.

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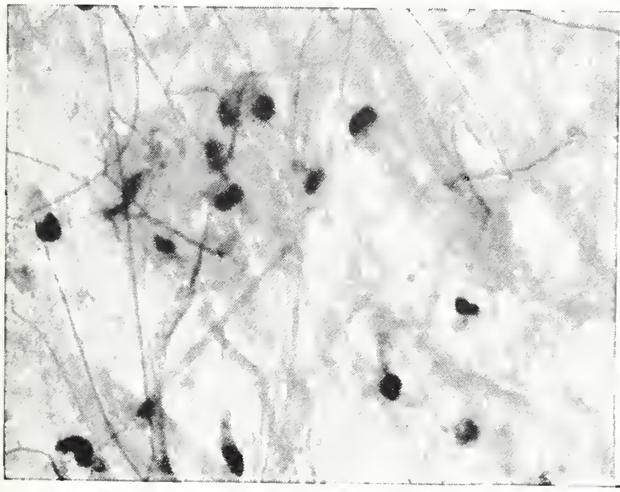

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GENERAL MEETING

Tuesday, April 7, 1959, Colonial Ball Room, Hotel Muehlebach

MILTON T. ENGLISH, M.D., Kirksville, Presiding.

11:00 a.m. Esophageal Hiatal Hernia, James H. Growdon, M.D., Little Rock, Arkansas.

Esophageal hiatal hernia is a common disorder. It is often a progressively disabling condition that may even threaten life. Prolonged ineffective medical management may prove disastrous. Proper selection of patients for operation requires careful correlation of symptoms with the pathology present. This may prove to be a perplexing problem which tests the acumen of the physician. These matters will be considered.

11:30 a.m. Abnormal Uterine Bleeding, Roy G. Holly, M.D., Omaha, Nebr.

The problem is defined as any uterine bleeding which varies in time, amount or duration from a normal menstrual pattern. Confusion exists for several reasons: (1) endometrial morphology not completely known; (2) total picture of pituitary, ovarian, endometrial relationship not complete, and (3) nomenclature varied.

Classification and diagnostic tools are discussed. Illustrative case examples are presented emphasizing diagnosis and therapy of endometrial polyps, irregular shedding and anovulatory bleeding.

12:00 noon. University of Missouri Medical Alumni Luncheon, Trianon Room.

UNIVERSITY OF MISSOURI MEDICAL ALUMNI ASSOCIATION

LUNCHEON MEETING

Tuesday, April 7, 1959, 12:00 noon, Trianon Room

FRANK G. MAYS, M.D., Washington, Presiding

Presentation of the Fourth Citation of Merit of the University of Missouri to a Medical Alumni, Scott M. Smith, M.D., Salt Lake City, Utah, recipient.

Address, Elmer Ellis, President, University of Missouri.

GENERAL MEETING

Tuesday, April 7, 1959, Colonial Ball Room, Hotel Muehlebach

JAMES C. COPE, M.D., Columbia, Presiding

2:00 p.m. Pancreatitis, E. E. Wollaeger, M.D., Rochester, Minn.

The major therapeutic problem among patients with chronic recurring pancreatitis is the prevention of attacks of severe abdominal pain. In the absence of effectual medical means of accomplishing this purpose, a number of surgical procedures have been employed, with beneficial results in some patients. However, no single operation has been found to give uniformly satisfactory results, and there is still much room for improvement in the therapy of this disease.

2:30 p.m. Recent Advances in Roentgenology of the Biliary System, Lester W. Paul, M.D., Madison, Wis.

Since the advent of oral cholecystography some thirty years ago there has been continuing improvement in technics and contrast media so that today the examination can be considered one of the most reliable of the roentgen methods of examination. Current procedures used in examination of the gallbladder and the interpretation of cholecystograms will be discussed. Methods used to opacify the biliary duct system, will also be described, including the use of oral contrast media. Mention will be made of methods used to opacify the liver and the place of these in the investigation of patients with biliary tract disease.

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3:00 p.m. Intermission to View Exhibits, Grand Ball Room.

3:30 p.m. Panel: Reflux Esophagitis.
Moderator: Hector W. Benoit, M.D., Kansas City.
Panelists: Guest Speakers.

ANNUAL BANQUET IN HONOR OF PAST PRESIDENTS

Tuesday, April 7, 1959, 7:30 p.m., Colonial Ball Room, Hotel Muehlebach

W. F. FRANCKA, M.D., Hannibal, Presiding

Introduction of Guests.
Presentation of Past Presidents.
Presentation of 50 Year Pins.
Installation of the President, Ralph Perry, M.D., Kansas City.
Presentation of Past President's Key.
The Doctors' Glory Road, Dr. Carl S. Winters, Oak Park, Illinois.

GENERAL MEETING

Wednesday, April 8, 1959, Colonial Ball Room, Hotel Muehlebach

9:00 a.m. Motion picture: Hemorrhoids or Piles, and the Early Detection of Rectal Cancer.

JOHN I. MATTHEWS, M.D., Jefferson City, Presiding

9:30 a.m. The Management of the Migraine Headache Patient, Robert E. Ryan, M.D., St. Louis.

Migraine is probably the most common form of vascular headache seen in the practice of medicine. To give the patient the proper treatment the correct diagnosis must be made. For the proper diagnosis, the most important factor is for the patient to give the physician a good history of his headache problem. If the physician knows the symptomatology of migraine and a good case history is obtained, the diagnosis should be made without difficulty. Treating migraine, like any form of headache problem, should be twofold. The physician should both (1) prevent any future attacks from occurring and (2) give the patient something to abort his present headache attack.

9:45 a.m. The Surgical Treatment of Peptic Ulcer, Russell J. Crider, M.D., and Ben L. Neubeiser, M.D., St. Charles.

The surgical treatment of peptic ulcer has as its primary aim the eradication, or healing, of the ulcer. Extensive studies have shown that there are several surgical procedures which will accomplish this with almost equal facility. Many factors should enter into the selection of the type of operative procedure to be used. The same procedure will not give the same results in all types of patients. Such factors as age, habitus, symptoms and complications, location of the ulcer, temperament and occupation, may influence the type of procedure to be chosen. Choice of the wrong procedure may leave the patient a gastric cripple—little or no better off than with an ulcer. This study is made to show that by careful evaluation, a more intelligent individual approach in the choice of procedure can be made, with less chance of disabling side effects. More than 200 operative cases are included in this study.

10:00 a.m. The Limited Use of Steroids in Allergic Diseases, Stanley L. Goldman, M.D., Kansas City.

Frequently today steroid treatment is used before other methods of treatment have been attempted or given an adequate trial. Often the long term use of steroids is used without any attempt to isolate the allergen causing the disease or attempting to control this allergen. Steroid treatment, both long term and short term, is useful under certain circumstances but is definitely a situation fraught with many dangers. A long series of patients with allergic disease has been reviewed and the small incidence of patients requiring steroid treatment is noted with an explanation of the need in each case.

10:15 a.m. The Management of Carcinoma of the Lip, E. J. Schewe, Jr., M.D., Columbia.

The presentation will include discussion of (1) incidence and etiologic factors, (2) clinical features, (3) selection of treatment methods (radiotherapy versus surgery), (4) management of metastases, (5) prognosis. Colored slides will illustrate representative lesions and treatment methods.

10:30 a.m. Intermission to Visit Exhibits, Grand Ball Room.

11:00 a.m. Present Day Concepts in the Treatment of Occlusive Cerebral Vascular Disease, Clark H. Millikan, M.D., Rochester, Minn. Sponsored by the Missouri Society of Internal Medicine. Room 362.

11:00 a.m. Panel: Office Psychiatry.
The Referral: Making the Examination and Diagnosis, Arnold S. Block, M.D., St. Louis.
Psychotherapy: Principles, Technics and Types, Kenneth D. Michael, M.D., St. Louis.
Emergency Treatment and Planning With Family and Community Members, Leopold Hofstatter, M.D., St. Louis.
Sponsored by the St. Louis Society of Neurology and Psychiatry. Room 363.

11:00 a.m. Panel: Modern Treatment of Tuberculosis: Drugs-Surgery; Hospital-Home.
Moderator: Florence E. MacInnis, M.D., Kansas City.
Internal Medicine, Paul Murphy, M.D., St. Louis.
Home Treatment, I. J. Flance, M.D., St. Louis.
Hospital Treatment, Bernard Friedman, M.D., St. Louis.
Nursing, Lucille C. Becker, R.N., Jefferson City.
Surgery, John W. Polk, M.D., Springfield.
Pediatrics, R. W. Latham, M.D., Kansas City.
Pathology, Charles B. Wheeler, M.D., Kansas City.
Sponsored by the Missouri Tuberculosis Association. Room 364.

1:30 p.m. House of Delegates, Trianon Room.

DELEGATES

County Society	*Delegate*	*Alternate*
Andrew	Forrest C. Long, Savannah	W. C. Baker, Savannah
Audrain	Harold D. Lankford, Mexico	Benjamin N. Jolley, Mexico
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Benton	T. S. Reser, Cole Camp	James A. Logan, Warsaw
Boone	M. Pinson Neal, Columbia	C. M. Waggoner, Columbia
Boone	James C. Cope, Columbia	Joseph E. Flynn, Columbia
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Buchanan	Ernest E. Wadlow, St. Joseph	John N. Martin, St. Joseph
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Butler-Ripley-Wayne	Frank Johnson, Doniphan	
Butler-Ripley-Wayne	H. H. Cline, Piedmont	
Callaway		George Wood, Fulton
Camden		
Cape Girardeau	H. V. Ashley, Jr., Cape Girardeau	Paul Wolff, Cape Girardeau
Carter-Shannon		
Carter-Shannon		
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Chariton-Macon-Monroe-Randolph	F. A. Barnett, Paris	G. M. Ragsdale, Paris
Chariton-Macon-Monroe-Randolph	A. P. Rowlette, Moberly	C. C. Smith, Moberly
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Clay	Sidney Schroeder, Liberty	John B. Withrow, North Kansas City
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Dallas-Hickory-Polk		
Dallas-Hickory-Polk		
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Franklin-Gasconade-Warren-	George Workman, Hermann	Paul A. Brenner, Owensville
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Crawford	F. A. Elders, Cuba	A. R. Baumann, Steelville
Dent	B. J. Bass, Salem	M. M. Hart, Salem
Pulaski	C. S. Miller, Waynesville	
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Reynolds	None	
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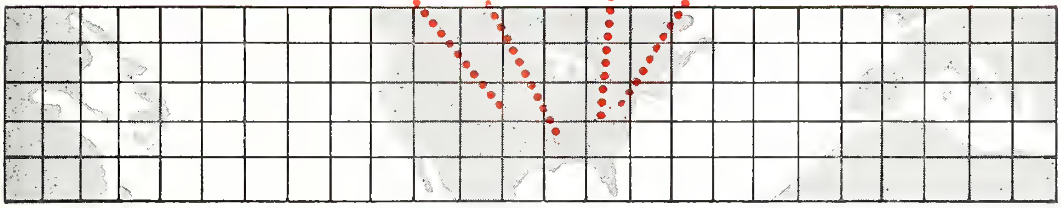

INVESTIGATORS AGREE ON OPTIMAL ATARAX DOSAGES

For childhood behavior disorders	10 mg. tablets Syrup	3-6 years, one tablet t.i.d. over 6 years, two tablets t.i.d. 3-6 years, one tsp. t.i.d. over 6 years, two tsp. t.i.d.
For adult tension and anxiety	25 mg. tablets Syrup	one tablet q.i.d. one tbsp. q.i.d.
For severe emotional disturbances	100 mg. tablets	one tablet t.i.d.
For adult psychiatric and emotional emergencies	Parenteral Solution	25-50 mg. (1-2 cc.) intramuscularly, 3-4 times daily, at 4-hour intervals. Dosage for children under 12 not established.

Supplied: Tablets, bottles of 100. Syrup, pint bottles. Parenteral Solution, 10 cc. multiple-dose vials.

References: 1. Smigel, J. O., et al.: J. Am. Ger. Soc., in press. 2. Freedman, A. M.: Pediat. Clin. North America **5**:573 (Aug.) 1958. 3. Ayd, F. J., Jr.: New York J. Med. **57**:1742 (May 15) 1957. 4. Menger, H. C.: New York J. Med. **58**:1684 (May 15) 1958. 5. Coirault, M., et al.: Presse méd. **64**:2239 (Dec. 26) 1956. 6. Bayart, J.: Presented at the International Congress of Pediatrics, Copenhagen, Denmark, July 22-27, 1956.

ATARAX

ROERIG
New York 17, N. Y.
Division, Chas. Pfizer & Co., Inc.
Science for the World's Well-Being

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St. Louis	Oscar P. Hampton, Clayton	Michael McNalley, Clayton
St. Louis	Paul R. Whitener, St. Ann	Joseph D. O'Keefe, St. Louis
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Wright	R. W. Denny, Mtn. Grove	S. W. Connor, Mtn. Grove
Douglas	Marvin Gentry, Ava	
Ozark	Deborah Doan, Bakersfield	
Webster	T. M. Macdonnell, Marshfield	C. R. Macdonnel, Marshfield
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Bates	A. L. Hansen, Butler	John Cooper, Butler
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Cedar	Robert Magee, El Dorado Springs	William Richter, Stockton
St. Clair	D. H. Giesler, Osceola	R. H. Brownsberger, Appleton City
Vernon	Roy Pearse, Nevada	Rolla Wray, Nevada

TECHNICAL EXHIBITS

Grand Ball Room, Hotel Muehlebach

Standard Process Laboratories, Milwaukee, Wis. Booth 1.

Introducing and featuring the first revolutionary specific ulcer medication to contain true cell proliferants—Anti-Gastrin. Anti-Gastrin contains colloidal isotopic cilicon, colloidal trace mineral silicates, allantoin and chlorophyll. It contains no alkalis or antispasmatics, is non-constipating and nontoxic, no contraindications, does not inhibit the normal physiology of nutrtion and digestion. Clinically proven effective in 85 per cent of refractory peptic ulcers. Provided a four year cure on 14 out of 17 cases of chronic mucous and ulcerative colitis.

Health Insurance Council, New York, N. Y. Booth 2.

The exhibit is designed to provide general information on health insurance as underwritten by insurance companies. In addition, it also makes available information on uniform claim forms for use by doctors and hospitals in support of health insurance claims.

The Upjohn Company, Kalamazoo, Mich. Booth 3.

Professional representatives of the Upjohn Company are eager to contribute to the success of the meeting. We are here to discuss with you products of Upjohn research that are designed to assist you in the practice of your profession. We solicit your inquiries and comments.

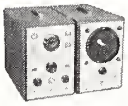
Roche Laboratories, Nutley, N. J. Booth 4.

Madribon, a completely new, low-dosage antibacterial distinguished by particular therapeutic effectiveness in upper respiratory infections. Findings in approximately 7,000 clinical subjects demonstrate that low doses of Madribon, administered at 24-hour intervals, provide good to excellent results in more than 90 per cent of patients. Madribon is characterized by a high degree of safety plus a notable absence of skin rashes.

Mead Johnson & Company, Evansville, Ind. Booth 5.

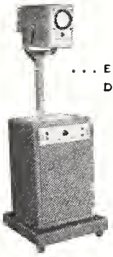
The Mead Johnson exhibit has been arranged to give you the optimum in quick service and product information. To make your visit productive, specially trained representatives are on duty to tell you about their products.

. . . TRUE ECG PORTABILITY



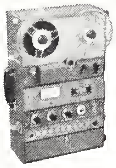
. . . VECTORCARDIOGRAPHY

. . . PHONOCARDIOGRAM
ECG RECORDING



. . . ECG MONITORING
DURING SURGERY

. . . MULTI-CHANNEL
RESEARCH
RECORDING



. . . HEART SOUND
TAPE RECORDING

You take it for granted that today's medical instrumentation is basically accurate and reliable. But *beyond* these expected fundamentals, the dependability – usefulness – and convenience of any instrument depends almost wholly on how much the instrument manufacturer *knows of your needs* and how well he has *applied this knowledge*. For more than 40 years, Sanborn Company has asked the general practitioner and medical school teacher . . . the cardiologist and researcher . . . the industrial physician and clinician, what *they* particularly need for *greatest* usefulness and value in diagnostic and research instrumentation. The instruments shown here are typical Sanborn answers to these needs . . . exemplified in the field of cardiography by the Model 300 Visette – the first ECG to make "18-pound portability" a practical reality. Since its introduction less than two years ago, the Visette has literally become the "travelling diagnostic companion" of over 4000 of your colleagues. When you choose any instrument to provide you with information for diagnosis and research, consider the instrument's background and past – as a good gauge of its *future* value to you. Sanborn Company, Medical Division, 175 Wyman Street, Waltham 54, Massachusetts.

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St. Louis *Branch Office* 634 No. Grand Blvd.
Room 245, Jefferson 5-7740
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8621 East 55th St., Fleming 3-2038

Medco Products Company, Inc., Tulsa, Okla. Booth 6.

Presenting the Medco-Sonlator. Providing a new concept in therapy by combining muscle stimulation and ultra sound simultaneously through a Single Three-Way Sound Applicator. The Medco-Sonlator is a distinct advance in the effectiveness of physical therapy in your office or hospital. A few minutes spent in our booth should prove of value to your practice.

Medical Protective Company, Fort Wayne, Ind. Booth 7.

The Medical Protective Company, originator of Professional Protection Exclusively, now in its sixtieth year, provides unexcelled coverage in any claim or suit for damages based on professional services rendered or which should have been rendered, plus unparalleled experience from the successful handling of some 78,000 claims and suits in the professional liability field.

E. R. Squibb & Sons, New York, N. Y. Booth 8.

E. R. Squibb & Sons has long been a leader in development of new therapeutic agents for prevention and treatment of disease. The results of our diligent research are available to the Medical Profession in new products or improvements in products already marketed. At Booth 8, we are pleased to present up-to-date information on these advances for your consideration.

Missouri Medical Service (Blue Shield), St. Louis. Booth 9.

Full information on the St. Louis Blue Shield Plan's new Selective program is available at Booth 9. Representatives will be happy to answer your questions about this new and extensively improved protection and about other St. Louis Blue Shield programs.

C. B. Fleet Company, Inc., Lynchburg, Va. Booth 10.

Fleet features Clysmathane, its most recent contribution in the field of medication by rectum—an advanced method of xanthine therapy. Clysmathane is a stable solution of theophylline monoethanolamine; easily retained; rapid and uniform absorption, prompt and predictable blood levels; with no rectal irritation after prolonged use.

Great Books of the Western World, Grand Rapids, Mich. Booth 11.

The Great Ideas Program, a new advancement in liberal education, is built around the revolutionary Syntopicon. This master-key "Idea-Indexes" all the Great Books, making it possible to find what the great writers and thinkers said about any idea in minutes. The Program will help business and professional people, students, graduates—or anyone interested in exploring the fascinating world of great ideas.

Geigy Pharmaceuticals, Yonkers, N. Y. Booth 12.

Geigy Pharmaceuticals extends a cordial invitation to members of the Association to visit their exhibit. Reports of the most recent clinical research studies regarding Butazolidin, Preludin, Sterosan with Hydrocortisone and Dulcolax are presented by the staff in attendance.

American Ferment Company, Inc., New York, N. Y. Booth 13.

Have you tried Tod'L, the sudsing, emollient, antibacterial skin cleanser for the treatment and prevention of various skin affections? Also featured: Caroid and Bile Salts as a logical complement in modern methods of therapy, Falgos buffered analgesic, Alcaroid Antacid and Supligol for nonsurgical biliary problems.

The Stuart Company, Pasadena, Calif. Booth 14.

E. F. Hutton & Company, Kansas City, Mo. Booth 15.

Complete supply and display of recommended mutual funds. General information and pamphlets on securities and the operation of the New York Stock Exchange. Dow Jones news ticker, teletype and direct line to E. F. Hutton's Kansas City office. Up to the minute prices and information on any securities.

Dome Chemicals, Inc., New York, N. Y. Booth 16.

Dome presents Acid Mantle topical corticosteroids: Cort-Dome Creme and Lotion (ph 4.6); Neo-Cort-Dome; Cor-Tar-Quin Creme and Lotion; Cort-Quin Creme; Hist-A-Cort-E and Es-A-Cort Creme for senile vaginitis, kraurosis, pruritus and leukoplakia vulvae. Dome introduces a complete acne treatment: Acne Dome Creme, Compact, Medicated Cleanser, Lotion; Domerine Shampoo; Acne-Cort-Dome; Acid Mantle, Domeboro, Vi-Dom-A-A Pilletts and Vlem-Dome. Soyaloid Colloid Infant Bath, Soy-Boro Powder, and Soy-Dome Soapless skin cleanser are also shown.

The Coca-Cola Company, Atlanta, Ga. Booth 17.

Ice-cold Coca-Cola served through the courtesy and cooperation of the Kansas City Coca-Cola Bottling Co., Kansas City, Missouri, and the Coca-Cola Company.

STOP running noses and open stuffed noses orally

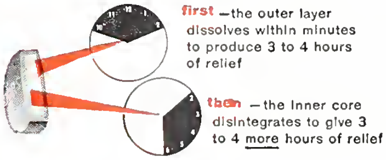
with TRIAMINIC, the oral nasal decongestant

- in nasal and paranasal congestion
- in sinusitis
- in postnasal drip
- in allergic reactions of the upper respiratory tract

safer and more effective than topical medication

- reaches *all* respiratory membranes systemically
- avoids "nose drop addiction"
- presents no problem of rebound congestion
- provides longer-lasting relief

Relief with Triaminic is prompt and prolonged because of this special timed-release action . . . beneficial effect starts in minutes, lasts for hours.



first —the outer layer dissolves within minutes to produce 3 to 4 hours of relief

then —the inner core disintegrates to give 3 to 4 more hours of relief

Each TRIAMINIC *Tablet provides:*

Phenylpropanolamine HCl . . .	50 mg.
Pheniramine maleate	25 mg.
Pyrilamine maleate	25 mg.

One-half of this formula is in the outer layer, the other half is in the core.

Dosage: One tablet in the morning, mid-afternoon and in the evening, if needed.

Triaminic®

Also available: For the occasional patient who requires only half dosage: timed-release Triaminic Juvelets. Each Juvelet is equivalent to ½ of a Triaminic Tablet.

For those patients who prefer liquid medication: Triaminic Syrup. Each 5 ml. tsp. of this palatable syrup is equivalent to ¼ of a Triaminic Tablet.

SMITH-DORSEY • a division of The Wander Company • Lincoln, Nebraska • Peterborough, Canada

Dumas-Wilson & Company, St. Louis, Mo. Booth 18.

Dumas-Wilson & Co. extends a cordial invitation to the physicians attending this Annual Session to visit our booth featuring several new specialty items of interest to the specialist as well as the general practitioner.

Pfizer Laboratories, Brooklyn, N. Y. Booth 19.

Visit the Pfizer display which features Cosa-Tetracyn, Cosa-Terramycin and Cosa-Signemycin, Pfizer's flucosamine potentiated antibiotics. The Pfizer Representative will be pleased to provide you with information on Diabinese—a new oral hypoglycemc agent, Vistaril which is classified by the Council on Drugs of the American Medical Association as a Psychotherapeutic Antihistamine, and Darison—a new anticholinergic compound processing a high order of therapeutic effectiveness and prolonged duration of action.

Carnation Milk Company, Los Angeles, Calif. Booth 20.

Carnation Company cordially invites you to visit Booth 20 where Medical Specialist representatives will be pleased to welcome old and new friends of the Missouri State Medical Association. Recent literature and information regarding Carnation Evaporated, Carnation Instant Non-Fat, and our newest product Carnalac are available. Any question pertaining to our physician-researched material for use in your practice or hospital will be cheerfully discussed.

Merck Sharp & Dohme, Philadelphia, Pa. Booth 21.

A new and promising adrenocortical steroid is featured at the Merck Sharp & Dohme booth. Decadron dexamethasone possesses all the basic actions and effects of other glucocorticoids but in different degree. Its anti-inflammatory activity is more potent on a weight basis than any other known glucocorticoid. Electrolyte imbalance is not ordinarly a therapeutic problem. Diuril—a diuretic compound that possesses favorable biologic properties common to both the mercurial preparations and the carbonic anhydrase inhibitors—is also of interest. Following a single oral dose, Diuril produces effects within two hours which last for 6 to 12 hours. It is repeatedly effective when administered continuously once or twice daily for a long period. Technically trained personnel are present to discuss these and other subjects of clinical interest.

Eisele & Company, Nashville, Tenn. Booth 22.

Eisele & Company is happy to display at the Missouri State Medical Association meeting their regular line of Hypodermic Syringes both the Regular and Interchangeable types. Eisele & Company also displays their line of Hypodermic Needles, Clinical Thermometers, Eco Bandage and specialty Glasswears.

W. B. Saunders Company, Philadelphia, Pa. Booth 23.

New Saunders titles of special interest to the clinical physician include: Cecil & Loeb: Textbook of Medicine; Nelson: Pediatrics, Current Therapy 1959; Lewis: Dermatology; Wohl: Long-Term Illness; DePalma: Fracture Atlas, and Roberts: Difficult Diagnosis.

Maico Electronics, Inc., Minneapolis, Minn. Booth 24.

Wm. P. Poythress & Co., Richmond, Va. Booth 25.

A cordial welcome awaits you at the Poythress booth (No. 25). Solfoserpine, new distinctive combination of reserpine, phenobarbital and colloidal sulfur; Mudrane, outstanding anti-asthmatic tablet; Solfoton; and other well-established Poythress products are featured. We will be grateful for your requests for literature and trial supplies.

Exercycle Corporation, Kansas City, Mo. Booth 26.

Julius Schmid, Inc., New York, N. Y. Booth 27.

G. D. Searles & Co. Ill. Booth 28.

You are cordially invited to visit the Searle Booth where our representatives will be happy to answer any questions regarding Searle Products of Research. Featured are Dartal, the new tranquilizing agent which controls activities associated with anxiety states and other neuroses; Enovid, the new synthetic steroid for treatment of various menstrual disorders; Zanchol, a new biliary abstergent; Nilevar, the new anabolic agent, and Rolicton, a new safe, nonmercurial oral diuretic. Also featured are Vallestril, the new synthetic estrogen with extremely low incidence of side reactions; Pro-Banthine and Pro-Banthine with Dartal, the standards in anti-cholinergic therapy; and Dramamine and Dramamine-D, for the prevention and treatment of motion sickness and other nauseas.

Sanborn Company, Waltham, Mass. Booth 29.

Smith, Kline & French Laboratories, Philadelphia, Pa. Booth 30.

S.K.F. features (1) Temaril® Tablets and Syrup, the oral medication specifically for the relief of itching, both mild and severe; (2) Vi-Sorbin®, the potent modern tonic that contains B_{12}, B_6, iron and folic acid, and incorporates the Absorption Enhancement Factor, D-Sorbitol; and (3) Compazine®, the tranquilizer and antiemetic with minimal side effects.

Marion Laboratories, Inc., Kansas City, Mo. Booth 31.

Marion's new hematinic tablets, Anasorb and Fumasorb, are displayed. They both contain Ferrous Fumerate (a well tolerated, well absorbed iron) and d-Sorbitol, an iron absorption enhancement factor. Each member and guest of the Missouri State Medical Association is cordially invited to visit the Marion booth, receive a friendly smile, a sincere "Welcome, Doctor," and a brief discussion of our new products.

In the Treatment of Rheumatic Disorders Greater stability of maintenance dosage minimizes risks of hormonal imbalance

In Sterazolidin, the anti-inflammatory actions of prednisone and Butazolidin* are combined to permit lower effective dosage of each. Clinical experience has indicated that patients can be well maintained on this combination over prolonged periods with relatively low, stable dosage levels of each component, thus minimizing the problems arising from excessively high doses of corticosteroids. Other side effects have also been gratifyingly few. Antacid and spasmolytic components are contained in Sterazolidin capsules for the benefit of patients with gastric sensitivity.

Sterazolidin®: Each capsule contains prednisone 1.25 mg.; phenylbutazone 50 mg.; dried aluminum hydroxide gel 100 mg.; magnesium trisilicate 150 mg.; homatropine methylbromide 1.25 mg.

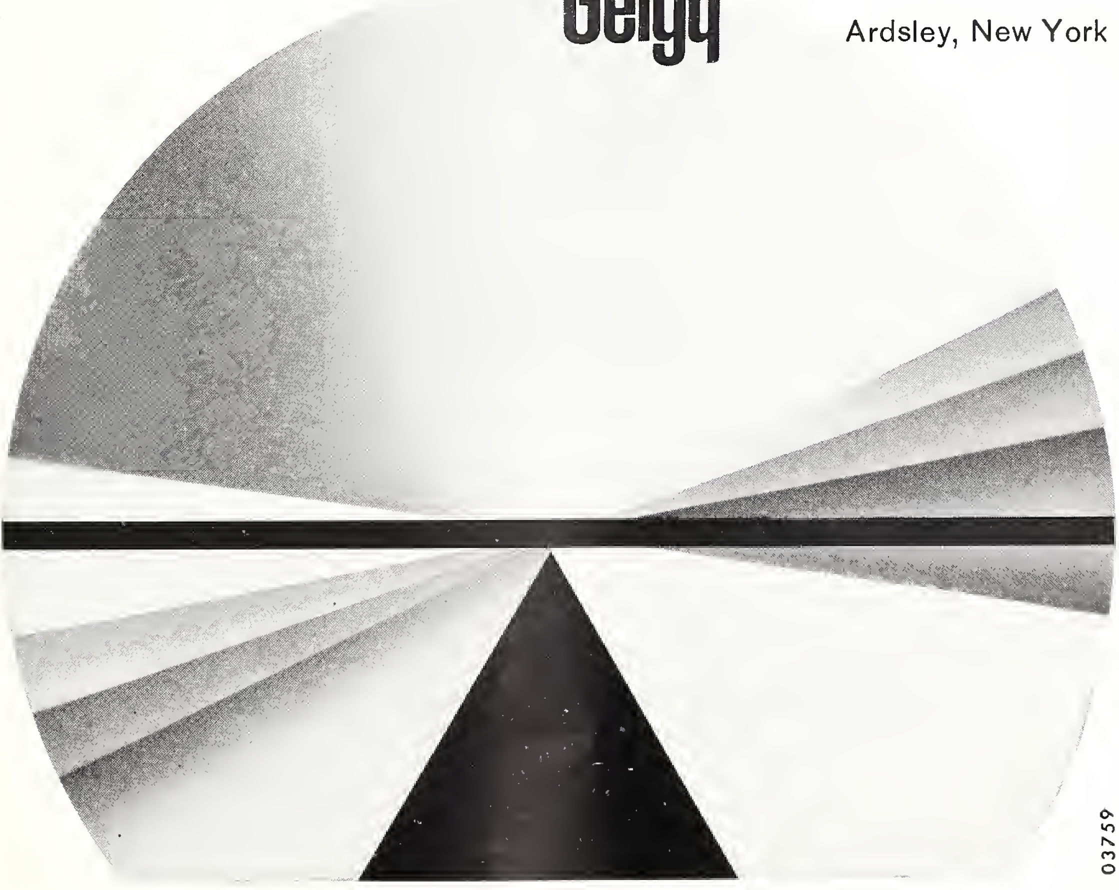
Detailed information available on request.

*Gelgy's trademark for phenylbutazone—Reg. U. S. Pat. Off.

new **Sterazolidin®** Capsules

prednisone-phenylbutazone, Geigy

Geigy Ardsley, New York



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HOLLAND-RANTOS, INC., NEW YORK, N. Y. BOOTH 32.

You are invited to discuss with Holland-Rantos representatives: Mechanical advantages of contouring Koro-flex Diaphragms; new, improved Nylmerate Jelly & Solution for vaginal leukorrheas; special Koromex a for use where "jelly alone" is indicated; beneficial cutaneous effects of Hollandex Ointment (with Silicones and natural vitamins A & D) upon contact—and neurodermatitis, decubitus ulcers, diaper rash, skin dryness.

MILEX PROFESSIONAL SPECIALTIES, PEORIA, ILL. BOOTH 33.

Milex Products display a complete line of Gynesic Specialties—including the Milex Plastic Folding Pessaries—Trichosan—Crescent and our Marital Guide. In addition we invite your inspection of our Uterine Cancer Detection instruments and a new device for Cold Coning of the cervix—combined with coagulation and suction.

LEDERLE LABORATORIES, PEARL RIVER, N. Y. BOOTH 34.

You are cordially invited to visit the Lederle Booth where our Medical Representatives are in attendance to provide the latest information and literature available on our line. Featured are Achromycin V, Aristocort, and many other of our dependable quality products.

ABBOTT LABORATORIES, NORTH CHICAGO, ILL. BOOTH 35.

The exhibit features the Abbott Laboratories Antibiotic Triad—three products which together provide control of all coccal infections: Erythrocin® Stearate, Compocillin®-VK and Spontin®. Also shown are Abbott's unique new "metered release dose form" products, Tral Gradumets® and Desoxyn Gradumets®, plus a selection of other Abbott specialties.

A. S. ALOE COMPANY OF KANSAS CITY, KANSAS CITY, MO. BOOTH 36.

CIBA PHARMACEUTICAL PRODUCTS, INC., SUMMIT, N. J. BOOTH 37.

The Ciba exhibit features Singoserp, a new synthetic analog of Reserpine which possesses the favorable cardiovascular effects of the Rauwolfia drugs but at the same time it is less sedative. The drug is indicated in most forms of arterial hypertension and pre-eclampsia associated with pregnancy when rapid reduction of blood pressure is not required. Singoserp has a wide margin of safety and an excellent therapeutic index which permits individualization of dosage and keeping side effects at a minimum.

ELI LILLY AND COMPANY, INDIANAPOLIS, IND. BOOTH 38.

You are cordially invited to visit the Lilly exhibit located in space number 38. The Lilly sales people in attendance welcome your questions about Lilly products and recent therapeutic developments.

THE S. E. MASSENGILL COMPANY, KANSAS CITY, MO. BOOTH 39.

Best wishes from Massengill to the Missouri State Medical Association for a most successful meeting. Massengill service representatives are on hand at the Massengill booth to discuss with you any Massengill product in which you are interested. The S. E. Massengill Company and its service representatives would like to cooperate, in any way possible, to make your meeting a complete success.

THE DIETENE COMPANY, MINNEAPOLIS, MINN. BOOTH 40.

Have you tasted Meritene . . . the whole protein supplement that does taste good? Visit our booth, enjoy a Meritene Milk Shake with its multiple nutritive values. While you're there, review the Dietene Diet based on Dietene Reducing Supplement. It provides the rare combination of low calories (1000) with high intake of protein and all essential vitamins and minerals in an interesting, effective, Safe weight reducing diet.

DOHO CHEMICAL CORPORATION, NEW YORK, N. Y. BOOTH 41.

Doho Chemical Corporation is pleased to exhibit: Turgasept—ionic deodorizer aerosol spray, neurtalizes odor immediately without floral masking or substituting a new odor. It is highly bactericidal and fungicidal and was primarily formulated for use in hospitals, nursing homes and animal clinics; however, can be used in any type malodor condition.

GEORGE A. BREON & COMPANY, NEW YORK, BOOTH 42.

U. S. VITAMIN CORPORATION, NEW YORK, N. Y. BOOTH 43.

On display . . . new 3-dimensional Bivan supplies biologically active whole water-soluble citrus bioflavonoid complex (as provided in C.V.P.) with multiple vitamins and minerals. Extends prophylaxis beyond usual dietary supplements in pregnancy and lactation, in medical, surgical and gynecologic practice, in geriatrics.

KING MERRITT & COMPANY, JEFFERSON CITY, MO. BOOTH 44.

ELECTRONIC BUSINESS EQUIPMENT, INC., KANSAS CITY, MO. BOOTH 45.

B. I. D.

ULCER CONTROL

all day ⊘

NEW

DARICON*

oxyphencyclimine hydrochloride

TABLETS

all night ⊘

patient comfort

Natural Prolonged Action–The action of DARICON, a more potent and better tolerated anticholinergic, is consistently prolonged because it has a unique chemical structure and is not dependent on "mechanical" means (e.g., special coating, adsorption on ion-exchange resin).

In addition to peptic ulcer, DARICON is also indicated for other gastrointestinal disorders characterized by hypersecretion, hypermotility and spasm (e.g., functional bowel syndrome, chronic nonspecific ulcerative colitis and biliary tract disease).

Dosage: 10 mg. b.i.d. (morning and evening). **Supply:** Tablets, 10 mg., white, scored. Bottles of 60 and 500.

*Trademark

EVEN REFRACTORY CASES RESPOND

Pfizer *Science for the world's well-being*
PFIZER LABORATORIES
Division, Chas. Pfizer & Co., Inc.
Brooklyn 6, N. Y.

William H. Rorer, Inc., Philadelphia, Pa. Booth 46.

Maalox, the non-constipating, pleasant tasting antacid and the new double strength tablet Maalox No. 2 are featured. Other product highlights are Fermalox, the new buffered iron tablet, Fermatin, a new dynamic tonic in a capsule for under-par patients, and Ascriptin, a rapid-acting professional salicylate. Our representatives are on hand to answer questions about these and other Rorer products.

C. V. Mosby Company, St. Louis, Mo. Booth 47.

New knowledge, new ideas, new research and technic—all are waiting for you in the newest Mosby books for 1958 and 1959. Come in. Look over these books at your leisure and convenience. If you wish his assistance, our experienced representative will be happy to discuss any book with you.

Book Reviews

The Physician-Writer's Book, Tricks of the Trade of Medical Writing. By Richard M. Hewitt, A.M., M.D., Senior Consultant, Section of Publications, the Mayo Clinic; Associate Professor of Medical Literature, the Mayo Foundation, Graduate School, University of Minnesota. W. B. Saunders Company, Philadelphia. 1957. Price $9.00.

The motto of this short book is a succinct quotation from an address by Alan Gregg—"The common level of medical and scientific writing in our professional books and journals already constitutes the most serious internal limitation to medical education and research."

The avowed objective of Dr. Hewitt is to elevate this common level through appropriate emphasis on selection of subject matter, rigid restriction to relevant material, coherence, accuracy and, above all, brevity. The technical aspects of editing a manuscript are also presented in an interesting, although, to an amateur, rather bewildering, fashion. The method of rearranging a prepared article for greater coherence through chopping it up with scissors, rearranging the component parts and then pasting them in a permanent order is a fascinating illustration of the tricks of the trade. Other topics that deserve a good deal of study and digestion include the preparation of tables and illustrations, the use of statistics and medical ethics.

Anyone who has an irrepressible urge to enrich the overburdened field of medical literature either by setting down profound original thoughts or perhaps the report of an isolated case will profit by thorough study of this book and application of its principles. E.G.K.

The Neuroses and Their Treatment. Edited by Edward Podolsky, M.D., Department of Psychiatry, Kings County Hospital, Brooklyn, New York, Psychiatrist, Boro Medical Center, Brooklyn, New York. Philosophical Library, New York, 1958. Price $10.00.

Doctor Podolsky has attempted to present a survey of the neurosis and their treatment through editing approximately forty papers dealing with this subject. They include papers that originally appeared in a great number of different psychiatric and medical journals. In a large collection of this type, there is a tremendous variation in the equality of the papers and their relative merits. They vary from some that are excellent presentations, to some that are rather poor. The subjects covered, extend from emotional probems and their treatments in infancy, to problems of senility. Treatment range extends from psychoanalysis to the organic and physical treatments.

The editor indicates including papers which contain the *latest* knowledge but unfortunately, there is no date of publication anywhere in the book, nor on the individual papers or the journals from which they were reprinted.

There is a certain unevenness in this type of presentation and question of the real usefulness of this type of book over a more consistantly written textbook, with the individual being able to go to the journals if he wants to refer to some specific subject written by a particular author.

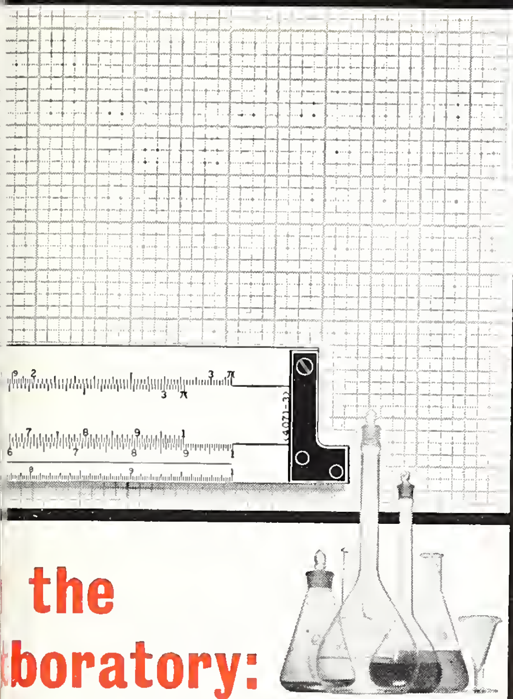
On the whole, the editor has made a good selection to cover his subject from the thousands of papers that would be available for inclusion in a book of this type. A.S.B.

Aids to Medical Diagnosis. By G. E. Frederick Sutton, M.C., M.D. (Lond.), Consultant Physician to the United Bristol Hospitals; Consultant Physician to the Bristol Regional Hospital Board; Consultant Cardiologist to the Ministry of Pensions; Teacher in Clinical Medicine, University of Bristol. Eighth Edition. Bailliere, Tindall and Cox, London. 1958. Price $3.50.

Here is a pocket edition, of which The Williams & Wilkins Co., Baltimore, are the exclusive U. S. Agents, that fills a glaring need of the busy practitioner.

This is a concise, authoritative book that enables the reader to review the symptoms, diagnosis and differential diagnosis in the problems of everyday practice without wading through page after page of unnecessary trivia.

To those modern practitioners who must do their reading more or less "on the run," this little book would be an invaluable aid. J.W.B.



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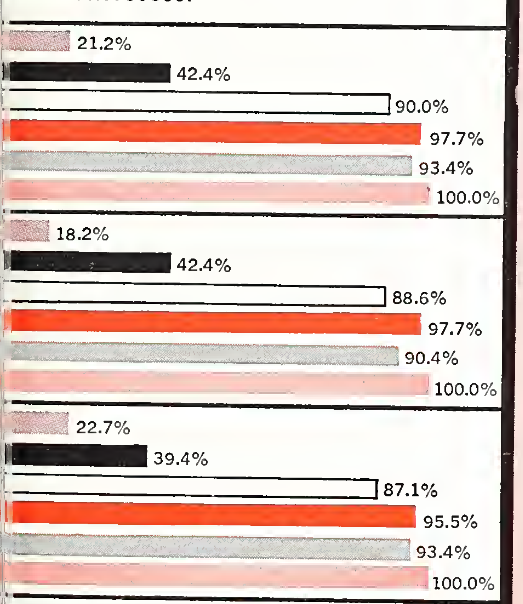
boratory:

r 90% effective
inst resistant staph

PARATIVE TESTS BY THREE METHODS
, TUBE DILUTION, CYLINDER PLATE)
30 STAPHYLOCOCCI[9]



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itage of organisms inhibited by the range of
itrations listed for each antibiotic.

Other Tao advantages:

Rapidly absorbed—stable in gastric acid,[7] TAO needs no retarding protective coating

Low in toxicity—freedom from side effects in 96% of patients treated; cessation of therapy is rarely required

Highly palatable—"practically tasteless"[7] active ingredient in a pleasant cherry-flavored medium.

Dosage and Administration: Dosage varies according to the severity of the infection. **For adults,** the average dose is 250 mg. q.i.d.; to 500 mg. q.i.d. in more severe infections. **For children** 8 months to 8 years, a daily dose of approximately 30 mg./Kg. body weight in divided doses has been found effective. Since TAO is therapeutically stable in gastric acid, it may be administered without regard to meals.

Supplied: TAO Capsules—250 mg. and 125 mg., bottles of 60. TAO for Oral Suspension—1.5 Gm., 125 mg. per teaspoonful (5 cc.) when reconstituted; unusually palatable cherry flavor; 2 oz. bottle.

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Tao dosage forms—for specific clinical situations

Tao Pediatric Drops

For children—flavorful, easy to administer.

Supplied: When reconstituted, 100 mg. per cc. Special calibrated droppers—5 drops (approx. 25 mg.) and 10 drops (approx. 50 mg.). 10 cc. bottle.

Tao-AC (Tao analgesic, antihistaminic compound)

To eradicate pain and physical discomfort in respiratory disorders.

Supplied: In bottles of 36 capsules.

Taomid* (Tao with triple sulfas)

For dual control of Gram-positive and Gram-negative infections.

Supplied: Tablets, bottles of 60. Oral Suspension, bottles of 60 cc.

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For direct action—in clinical emergencies.

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Missouri Medicine in Review

LEO H. POLLOCK, M.D.

FORTY YEARS AGO

Dr. M. F. Engeman, St. Louis, was a guest of the Chicago Medical Society, February 26, 1919, and read a paper entitled "The Skin a Mirror to the System."

Governor Gardner has appointed Dr. J. M. Yater, Nevada, a member of the board of managers of State Hospital No. 3 to take the place of Mr. W. M. Bowker, elected state senator for the district.

Leo H. Pollock, M.D.

Dr. G. Canby Robinson, St. Louis, associate professor of medicine and acting dean of Washington University Medical School, has been elected dean of the medical school.

Major Walter Fischel of St. Louis has been promoted to the rank of lieutenant-colonel. Colonel Fischel has been in Europe since May, 1917, attached to Base Hospital No. 21, which was organized by Washington University Medical School.

Major M. G. Seelig of St. Louis, who was a member of the staff of the surgeon-general at Washington during most of his service in the Medical Corps of the Army, has been promoted to the rank of colonel in the Medical Reserve Corps, since his discharge from the service.

For the first time in its history, women students of medicine will be admitted to the New York University and Bellevue Hospital Medical College. The women students will be received on the same basis as the men and will be accorded the full privileges of the classes.

Press dispatches announce that the residuary estate of Dr. Horace Fletcher, the expert on dietetics who died recently, is left to Harvard University, the income to be used to foster knowledge of healthful nutrition.

TWENTY-FIVE YEARS AGO

The definition for whisky sold for prescription purposes in the "U. S. Pharmacopoeia" is more rigid than the definition for "straight whisky" which the FACA issued February 6, 1934, in that pharmacopoeial whisky must be aged four years in charred wood containers and its alcoholic content must be not less than 47 per cent and not more than 53 per cent by volume of absolute alcohol. Medicinal whisky which does not conform to the pharmaceopoeial standard must be labeled to differentiate it clearly from the official product.

The St. Louis County Medical Society on February 28 issued Volume 1, Number 1, of the *St. Louis County Medical Society Bulletin.* The bulletin will be published twice a month just preceding the date of the meeting of the Society. The new bulletin is the fourth component Society publication in the state. The others are *The Weekly Bulletin of the St. Louis Medical Society,* the *Jackson County Medical Journal* and the *Buchanan County Medical Society Bulletin.* Dr. S. R. Richtarsic, Overland, is editor of the new bulletin and Dr. Clyde P. Dyer, St. Louis, is business manager.

The St. Louis Medical Society has appointed a centennial committee to arrange for a celebration of the one hundredth anniversary of the Society. The Society was planned in 1835, organized in 1836 and incorporated in 1837. Dr. Joseph Grindon, St. Louis, is chairman of the committee.

The February issue of the *Archives of Pediatrics,* contains a number of articles which appeared in its pages during the first year of its existence. It has just completed its fiftieth year, the original number having appeared January 15, 1884. It is the first journal in this country devoted exclusively to the diseases of infants and children.

TEN YEARS AGO

C. M. Waugh, M.D., and J. M. Davis, M.D., Tarkio, were recipients of the Tarkio Rotary Club's Buck of the Month award on February 1. The awards were given "for faithful and meritorious service to our community."

J. F. Harrison, M.D., Mexico, served as head of a committee to present to the voters of Mexico facts on the city manager form of government in preparation for an election on March 1.

Glenn W. Hendren, M.D., Liberty, has been named a member of the Board of Curators of the University of Missouri for a six year term.

William J. Shaw, M.D., Fayette, was elected president of the Missouri Academy of General Practitioners at a meeting in Mexico on February 13. Other officers elected were Robert C. McElvain, M.D., St. Louis, president-elect; M. B. Casebolt, M.D., Kansas City, vice president; W. W. Tillman, M.D., Bolivar, secretary; Kenneth Glover, M.D., Mount Vernon, treasurer.

Approximately 150 interns, residents and senior medical students of Greater St. Louis attended a panel discussion on "Rural Medical Practice" in the St. Louis Medical Society banquet room on February 21. The meeting was sponsored by the Committee on Rural Medical Service of the Missouri State Medical Association in cooperation with the St. Louis City and St. Louis County medical societies. Members of the discussion panel included Drs. Edward O. Damron, Elsberry; J. W. Well, Palmyra; Martin M. Hart, Salem; F. R. Crouch, Farmington; Henry Durst, Fulton, and J. W. Fleming, Jr., Moberly.

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and convalescence?

Convalescents, regardless of their years, share many of the tonic and recuperative needs of the aged, and wine is probably more widely recommended in the care of these patient groups than in any other.

Many generations of physicians have warmly advocated not only dry table wines but also sweet dessert wines of many varieties for their nutritional value in elderly and convalescent patients.

Now modern research supplies the raison d'être by clearly showing that wine not only supplies quick fuel but also serves to stimulate the desire for food where appetite is poor.

WINE AIDS DIGESTION—Wine has been found to increase salivary flow,[1] stimulate gastric secretion[2] and facilitate the gastrocolic reflex.[3]

WINE FOR GENTLE, SAFE SEDATION—Described as the safest of all sedatives, wine can often dispel the anxieties, fears and emotional pressures of old age and prolonged illness. The relaxation of gastric tension produced by moderate amounts of wine may be a significant factor in the prevention of dyspepsia. The systemic sedative[4] and vasodilative[5] actions of wine can be of great aid in cardiovascular disease.

For a few cents a day your patients can have wines produced from the world's finest grape varieties grown in an ideal climate and handled with consummate skill.

Research information on wine is available on request. Just write for your copy of "Uses of Wine in Medical Practice." Wine Advisory Board, 717 Market Street, San Francisco 3, California.

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From the Medical Schools

WASHINGTON UNIVERSITY

Award

Dr. W. Edward Lansche, resident in orthopedic surgery at Barnes Hospital and Washington University School of Medicine, was awarded the first J. Albert Key Memorial Fellowship at a February dinner in Hotel Chase. Presentation was made by Dr. Edward W. Dempsey, dean of the medical school. Dr. Carl A. Moyer, Bixby professor and head of the department of surgery, and the orthopedic visiting and house staff attended. The Fellowship Fund was made possible by contributions received from friends throughout the United States and members of the family of the late Dr. J. Albert Key, who was professor of clinical orthopedic surgery at Washington University School of Medicine from 1931 until the time of his death in August 1955. Dr. Lansche, a third-year resident, will complete five years of postgraduate hospital training in July 1959. He received his medical degree from Washington University School of Medicine in 1952; interned at Vanderbilt University Hospital, Nashville, Tenn., from July 1, 1952, until June 30, 1953, and completed two years of military service from 1953 to 1955.

Lectures, Meetings

Miss Lorraine Lake, assistant professor of anatomy and physical therapy at Washington University School of Medicine, delivered the Second Annual Beatrice Woodcock Memorial Lecture in February in San Francisco. The lecture was held in conjunction with the annual meeting of the Northern California Chapter, American Physical Therapy Association. More than 400 members and guests attended. Miss Lake, who is associate director of the department of physical therapy at Washington University in charge of clinical training, discussed "Electromyographic Investigations of Finger Movement and Their Anatomical Correlations." The Beatrice Woodcock Memorial Lecture was established by colleagues of the late Miss Woodcock in recognition of her nationally known work and publications in physical therapy, primarily in relation to abnormal curvature of the vertebral column.

Washington University Medical Society presented the second of two symposia on the permeability of cells at the March meeting in the auditorium of David P. Wohl, Jr., Memorial Hospital. Symposium moderator was Dr. Sidney F. Velick, associate professor of biological chemistry. Dr. Daniel Tosteson, associate professor of physiology; Dr. David Hogness, assistant professor of microbiology, and Dr. Bernard Becker, professor and head of the department of ophthalmology, presented current knowledge of the genetic differences in the control of the cation composition of red cells; the uptake of genetic units per se by bacterial cells, and the formation of the aqueous humor of the eye. Discussion was led by Dr. Oliver H. Lowry, professor and head of the department of pharmacology; Dr. Leonard Tolmach, associate professor of chemistry in radiology, and Dr. Neal Bricker, assistant professor of medicine and of internal medicine.

Dr. Edmund V. Cowdry, research professor emeritus and lecturer in anatomy at Washington University School of Medicine, was in Caracas, Venezuela, in February where he was a lecturer at the Central University and a guest of the Venezuelan government. He was invited by Dr. J. Quintero, director of the Venezuelan government's old age program, to discuss present knowledge on how cells of the human body age, the future of geriatrics and expectations in the prevention, diagnosis and treatment of cancer.

Appointment

Dr. Oliver H. Lowry, professor and head of the department of pharmacology, was among 14 U. S. scientists named in February to guide the expanded medical and scientific research program of the National Foundation. Announcement was made by Basil O'Connor, Foundation president. As members of a new medical advisory committee on research, the scientists will allocate all grants for research projects supported by March of Dimes funds. These now include studies of arthritis, birth defects, central nervous system disorders and virus diseases in general. The committee will also suggest the directions basic medical and scientific research should take to be most productive. Dr. Lowry has been on the staff of Washington University Medical School for the past 11 years and was dean of the school from 1955 until September of 1958. Committee members include Dr. Frank J. Dixon, Jr., a former member of the department of pathology at Washington University, now professor and chairman of the department of pathology, University of Pittsburgh School of Medicine.

Grants

New, supplemental and renewal grants of $182,257 have been awarded Washington University School of Medicine by the U. S. Public Health Service. Largest new grant was $10,465, to be renewed annually for two years, was awarded Dr. William T. Newton, instructor and Advertising Club fellow in surgery. Dr. Newton's research is primarily concerned with finding reasons why grafts of tissue from one person to another are unsuccessful. An $8,000 new grant to Dr. William J. Williams, assistant professor of medicine, will be used for a study of the chemical nature of

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bound histamine. Dr. James E. Miller, assistant professor of ophthalmology, has received $20,700 to continue a study of eye movement as related to the nervous innervation. Dr. Ernst Helmreich, assistant professor of biochemistry in medicine, has been awarded $17,153 to study the accumulation of amino acids and certain aspects of protein synthesis with isolated lymph node cells and their subcellular fractions. A $12,000 renewal grant to Dr. Samuel Guze, assistant professor of medicine and of psychiatry, will be used to continue an investigation of the feasibility of applying certain new technics to the study of the effect of drugs upon human behavior. Dr. Robert M. Burton, assistant professor of pharmacology, has received $12,000 to continue an investigation of the biochemical mechanisms through which tranquillizing agents, such as reserpine and chlorpromazine exert their pharmacologic action. The study is being conducted in collaboration with Dr. Richard Salvador, research instructor in pharmacology. A $10,925 grant to Dr. Milton Kern, instructor in microbiology in medicine, will be used to conduct research concerning the detection, measurement and properties of intracellular antibodies. Dr. W. Stanley Hartroft, Mallinckrodt professor and head of the department of pathology, received a renewal grant of $9,508; Dr. Robert M. O'Neal, associate professor of pathology, $9,530, and Dr. Gordon M. Schoepfle, associate professor of physiology, $2,875. Dr. Hartroft also received a $50,216 renewal grant for the pathology training program. Dr. Bernard Becker, professor and head of the department of ophthalmology, and Dr. James L. O'Leary, professor of neurology, received additional grants of $3,285 and $2,160, respectively, for the training programs in those departments.

UNIVERSITY OF MISSOURI

Guests

On February 4, Dr. Eugene M. Bricker, of St. Louis, was a guest of the Department of Surgery. He was a guest speaker and also conducted grand rounds.

On February 10, Dr. Theodore L. Badger, professor of Internal Medicine at Harvard University, was a visitor at the Medical Center and was escorted through the institution by Dr. Thorpe Ray, professor and chairman of the Department of Medicine, and Mr. David Phillippe, hospital administrative assistant.

Tours

On February 9, a group of Cub Scouts were taken on a tour through the University Hospital.

Trips and Talks

Dr. Roscoe L. Pullen, Dean of the School of Medicine, and Dr. Frank B. Engley, Jr., Assistant Dean, attended the meeting of the American Medical Association and the Association of American Medical Colleges held in Chicago from February 7 through 10 on medical education and licensure. A joint meeting of University presidents and medical school deans was attended with President Elmer Ellis in connection with the meeting. Problems of mutual interest in regard to medical education were discussed.

On February 10, a program sponsored by the Missouri Academy of General Practice and the University of Missouri School of Medicine was given before the Ozark Regional Medical Society members and their wives at Aurora. Participating in this program were Dr. Kenneth Keown, professor of anesthesiology, Dr. J. S. Roden, associate professor and chairman of the Department of Obstetrics and Gynecology, and Dr. Ray Hepner, professor of pediatrics, with a panel discussion on "Resuscitation of Infants Following Vaginal and Caesarean Section Deliveries."

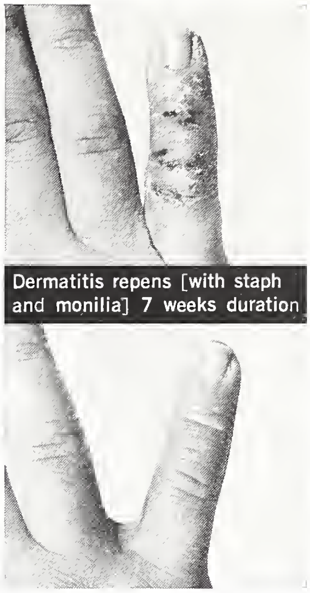
Dr. Jack M. Martt, assistant professor of medicine, spoke at a meeting of the National Life Underwriters Association sponsored by the Missouri Heart Association on January 23, in Columbia on the subject of "Common Heart Disease." On February 3, Dr. Martt spoke to the Boone County Medical Society in Columbia on the topic of "Coronary Artery Disease."

Dr. David G. Hall, assistant professor of obstetrics and gynecology, spoke to the members of the Jasper County Medical Society in Joplin on February 10 on the subject of "Hospital Management of the Toxemias of Pregnancy."

Dr. Joseph E. Flynn, professor and chairman of the Department of Pathology, participated in a panel discussion on anticoagulation therapy on January 19 and 20 at Excelsior Springs. The meeting was attended by the staff of the Excelsior Springs Hospital and the Excelsior Springs Veterans Hospital. On January 28, Dr. Flynn and Dr. Vincent P. Perna, assistant professor of pathology, participated in a meeting with the Catholic Hospital Association in St. Louis consisting of a workshop on the improvement of schools of medical technology. On February 14, Dr. Flynn attended a meeting of the Research Committee of the American Society of Clinical Pathologists held in New Orleans, Louisiana.

Dr. Robert L. Jackson, professor and chairman of the Department of Pediatrics, attended a meeting on "Special Problems in the Management of Diabetes" sponsored by the American Diabetes Association in cooperation with the St. Louis University School of Medicine, Washington University School of Medicine, and the University of Missouri School of Medicine. The meeting was held January 21 through 23 and at this time Dr. Jackson presented a paper on "Juvenile Diabetes." On January 22, Dr. Jackson also attended a meeting of the St. Louis Diabetes Association in St. Louis and

new for total management of itching,[1,2] inflamed,[3,4] infected[5,6] skin lesions



Dermatitis repens [with staph and monilia] 7 weeks duration

Cleared in 5 days

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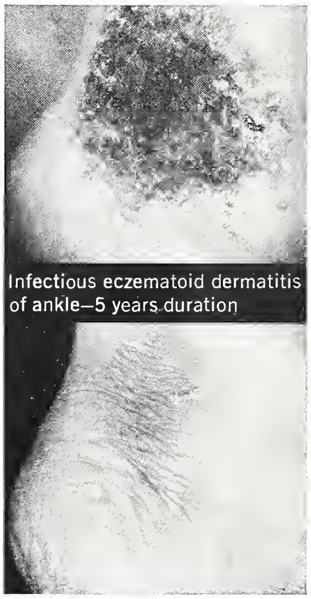
Mycolog Ointment – containing the new superior topical corticoid Kenalog – reduces inflammation,[3,4] relieves itching,[1,2] and combats or prevents bacterial, monilial and mixed infections.[5-7] It is extremely well tolerated, and assures a rapid, decisive clinical response for most infected dermatoses.

> "Thirty-one of 38 patients . . . obtained excellent or good control of dermatological lesions . . . [Mycolog] was highly effective, particularly in the management of mixed infections. Several recalcitrant eruptions which had not responded to previous therapy were remarkably responsive to the daily application of this preparation over periods of 2 to 3 weeks."[5]

For total management of itching, inflamed, infected skin lesions, Mycolog contains triamcinolone acetonide, an outstanding new topical corticoid for prompt, effective relief of itching, burning and inflammation[1-4] – neomycin and gramicidin for powerful antibacterial action[7] – and nystatin for treating or preventing Candida (Monilia) albicans infections.[8,9]



Infectious eczematoid dermatitis of ankle—5 years duration

Cleared in 20 days

Application: Apply 2 to 3 times daily. Supply: 5 Gm. and 15 Gm. tubes. Each gram supplies 1.0 mg. (0.1%) triamcinolone acetonide, 2.5 mg. neomycin base, 0.25 mg. gramicidin, and 100,000 units nystatin in PLASTIBASE.

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And whatever the topical corticoid need, a suitable Squibb formulation is available—Kenalog-S Lotion—7½ cc. plastic squeeze bottles. Each cc. supplies 1.0 mg. (0.1%) triamcinolone acetonide, 2.5 mg. neomycin base and 0.25 mg. gramicidin. Kenalog Cream, 0.1%—5 Gm. and 15 Gm. tubes. Kenalog Lotion, 0.1%—15 cc. plastic squeeze bottles. Kenalog Ointment, 0.1%—5 Gm. and 15 Gm. tubes.

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Squibb Quality — the Priceless Ingredient

'SPECTROCIN'®, 'MYCOSTATIN'®, 'PLASTIBASE'®, 'MYCOLOG' AND 'KENALOG' ARE SQUIBB TRADEMARKS participated in a panel discussion on oral treatment of diabetes. On January 31 through February 1, Dr. Jackson attended a committee meeting of the National Institutes of Health in Washington, D. C. The committee met to review training grants in metabolism and diabetes and to discuss changes in policy and future plans. On February 5 and 6, Dr. Jackson attended a meeting in Houston, Texas, sponsored by the Baylor University College of Medicine, Houston Society of Internal Medicine and the Houston Area Diabetes Association. Dr. Jackson discussed the use of DBI, a new oral hypoglycemic agent effective in lowering blood sugars in treatment of children with Diabetes Mellitus.

Dr. A. W. Merrick, professor of physiology, and Jerry B. Critz, graduate assistant, are coauthors of an article entitled "Serum Electrolyte and Hematocrit Changes in Young Rabbits Following Hemorrhage," published in the *American Journal of Physiology,* Volume 196, pages 173-175, 1959.

Dr. G. S. Lodwick, professor and chairman of the Department of Radiology, was a guest of the Texas Radiological Society at its annual meeting on January 29 through February 1. Dr. Lodwick presented three papers and participated in discussions. The papers presented were as follows: "Predicting Biological Behavior of Bone Tumors From Roentgenograms," "Roentgen Diagnosis of Diseases of the Aorta" and "Roentgen Evaluation of Operability and Survival in Primary Lung Cancer."

Dr. John L. Holmes, assistant professor of orthopedic surgery, and Dr. Joseph O. Ankenbrandt, assistant instructor in orthopedic surgery, attended the annual meeting of the American Academy of Orthopedic Surgeons held in Chicago January 22 through 29.

Dr. William H. Wade, assistant professor of surgery, spoke to the members of the Tri-County Medical Society at Washington, Missouri, on February 10, on the topic of "Chest Trauma."

New Appointments

Dr. Gerhard John Gislason was appointed associate professor of surgery (urology) effective March 1, 1959. Dr. Gislason received his B.S. in Medicine in 1940 from the University of North Dakota and his M.D. in 1942 from the University of Pennsylvania. He was associated with Hahemann Medical College as associate professor of urology and in private practice in Abington, Pennsylvania.

Dr. John A. Buesseler has been appointed associate professor of surgery (ophthalmology) effective April 1, 1959. Dr. Buesseler received a Bachelor of Philosophy in 1941 and his M.D. in 1944 from the University of Wisconsin. He is now associated with the University of Wisconsin as an assistant clinical professor of ophthalmology and is also practicing in Madison, Wisconsin.

Dr. James M. A. Weiss was appointed lecturer in psychiatry, part time, effective January 29. Dr. Weiss is director of the Division of Community Psychiatric Services, Malcolm Bliss Mental Health Center, St. Louis, Missouri and is assistant professor of psychiatry at the Washington University School of Medicine.

Dr. John F. Porterfield has been appointed fellow in pathology effective July 1. Dr. Porterfield received his M.D. in 1958 from Washington University and is at present interning at City Hospital in St. Louis.

Dr. Ira D. Godwin has been appointed instructor in pathology effective August 1. Dr. Godwin received his B.S. in 1952 and his M.D. in 1955 from the University of North Carolina. He is at present Chief of Laboratory Service at Scott Air Force Base, Illinois.

Dr. Victor M. Carnes has been appointed assistant instructor and first year resident in pathology effective May 1. He received his A.B. in 1951 from Harvard College and his M.D. in 1955 from Washington University of St. Louis. He is at present Medical Officer in the United States Navy at Pensacola, Florida.

Dr. James K. Mann has been appointed assistant instructor and first year resident in pediatrics effective July 1. He received his M.D. in 1958 from the University of Missouri and is now interning at the University of Chicago Clinics.

SAINT LOUIS UNIVERSITY

Dr. Paul Webb, consultant in aviation medicine, visited the School of Medicine as the guest of Dr. Alrick B. Hertzman, director of the Department of Physiology February 17 and lectured before the medical students on "Space Medicine." Dr. Webb came to St. Louis as the guest of the St. Louis Medical School and delivered an evening address before medical society membership. Dr. Webb was formerly with the Aero-medical Laboratory at Wright Patterson Air Force Base in Dayton.

Dr. James W. Colbert, Jr., Dean, School of Medicine, attended the annual congress on medical education of the American Medical Association held in Chicago last month.

Dr. C. Rollins Hanlon, director of the Department of Surgery, delivered a paper entitled "Preoperative and Postoperative Visualization of the Biliary Tracts" before the California Medical Association's annual state meeting held February 22-24. He also participated in a panel discussion on the treatment of hernia which was televised in conjunction with a postgraduate course held at Stanford University. Dr. Hanlon also was recently named to the nominating committee of the board of governors of the American College of Surgeons.

Dr. Clark Bublitz of the department of physiological chemistry at Johns Hopkins University School of Medicine was the guest of the Department of Pharmacology headed by Dr. Elizah Adams on February 16. Dr. Bublitz delivered a paper

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titled "The Enzymatic Conversion of D-Glucuronate to L-Ascorbate and L-Xylulose in Animal Tissue" before the medical faculty.

The Department of Ophthalmology of the School of Medicine and the Lighthouse-Society for the Blind sponsored a workshop in school vision screening for city and county parochial school and high school representatives and Catholic nursing school faculty and students February 11-13. Dr. Robert Dean Mattis, associate professor of clinical ophthalmology, Saint Louis University, and Dr. Lawrence T. Post, Jr., secretary, St. Louis Ophthalmological Society and instructor in ophthalmology, Washington University participated in the general fundamentals session. The purpose of the workshop was to assist parochial schools which do not have a formal eye health program. The workshop also provided an opportunity for parochial school nurses now conducting vision screening programs to attend refresher courses.

Dr. R. Walter Schlesinger, director of the Department of Microbiology, attended a conference on viruses and mammalian cells at the California Institute of Technology last month. Dr. Norman E. Melechen, assistant professor of microbiology, attended a conference on bacterial viruses at the University of California in Berkeley.

Dr. Don C. Weir, associate professor of clinical radiology, delivered a paper before a postgraduate meeting in radiology at the invitation of the University of Kansas Medical School. The subject of his paper was "Injuries to the Cervical Spine and Roentgen Evaluation of Acute Abdomen."

Dr. Robert D. Mattis, associate professor of clinical ophthalmology, attended the meeting of the New Orleans Academy of Ophthalmologists held the latter part of February.

A number of the medical faculty delivered papers before the Regional meeting of the American College of Physicians held in Kansas City February 21. Participants included: Dr. James J. Janney, associate professor of clinical medicine; Dr. Rene Wegria, director of the department of internal medicine; Dr. Robert H. Ramsey, instructor in internal medicine; Dr. Carlo P. Caciolo, instructor in internal medicine; Dr. Sidney Goldenberg, instructor in internal medicine; Dr. Jack Zuckner, assistant professor of clinical medicine. Other participants were: Drs. F. V. Reddy, George Duane and A. K. Simonidis, fellows in cardiology.

Dr. Cyril Costello, associate professor of surgery, Washington University School of Medicine, delivered the annual LeRoy Sante Lecture sponsored by the Phi Rho Sigma medical fraternity March 3. His topic was "Third Party Medicine—Past, Present, Future." Dr. Sante has been on the Saint Louis University medical faculty for the past forty years. He has written more than 100 scientific papers for professional journals and is the author of seven books on radiology. He is currently working on the twentieth edition of his book titled "Manual of Roentgenological Technique" and on the thirteenth edition of his book titled "Principles of Roentgenological Interpretation." His most recently completed work is an "Atlas of Miniature Roentgenograms," which represents examples of the various diseases of the whole field of radiology including the skeletal, respiratory, gastrointestinal and biliary systems as well as the urinary tract. Dr. Sante used 4,000 roentgen-ray photographs to complete the Atlas, which is now available to the medical profession.

MEDICAL SECRETARIES TO MEET

The Missouri State Medical Secretaries and Assistants Society will hold its annual meeting on April 25 and 26 at the Chase-Park Plaza Hotel, St. Louis. The session will open on April 25 with registration and a welcome address by Don C. Weir, M.D., St. Louis.

Subjects on the program are communications, personality and human relations, telephone technics, credit and collections, medical legal matters and insurance. There will be a luncheon meeting on Saturday and the presidents' banquet that evening. There will be a business session at 10:30 a.m. Sunday morning and a luncheon at which officers will be installed.

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BOOKS RECEIVED

Modern Clinical Psychiatry, by Arthur P. Noyes, M.D., Superintendent, Norristown State Hospital, Norristown, Pennsylvania; and Lawrence C. Klob, M.D., Professor and Executive Officer, Department of Psychiatry, College of Physicians and Surgeons, Columbia University; Director, New York State Psychiatric Instute. Fifth Edition. The W. B. Saunders Company, Philadelphia. 1958. Price $8.00.

Textbook of Medical Treatment, edited by D. M. Dunlop, M.D., Professor of Therapeutics and Clinical Medicine, University of Edinburgh; Physician, Royal Infirmary, Edinburgh; and Sir Stanley Davidson, M.D., Physician, H. M. The Queen of Scotland; Professor of Medicine and Clinical Medicine, University of Edinburgh; Physician, Royal Infirmary, Edinburgh; and S. Alstead, M.D., Regius Professor of Materia Medica and Therapeutics, Glasgow University. Seventh Edition. E. & S. Livingstone Ltd., Edinburgh and London. 1958. Price $11.00.

Aids to Medical Diagnosis, by G. E. Frederick Sutton, M.D., Consultant Physician, United Bristol Hospitals; Consultant Physician to the Bristol Regional Hospital Board; Consultant Cardiologist to the Ministry of Pensions; Teacher in Clinical Medicine, University of Bristol. Eighth Edition. Bailliere, Tindall and Cox, London. 1958. Price $3.50.

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"ankle-itis"

there's pain and
inflammation here...
it could be mild
or severe, acute or
chronic, primary or
secondary fibrositis — or even
early rheumatoid arthritis

Curiosa et Trivia

William B. McCunniff

Oswego, New York, police official brought emergency maternity patient to hospital at height of recent record-breaking snow, by driving ten miles backward on single-lane path. This *is* the hard way to deliver a breech!

By 1909, it was well established that Colorado Springs citizens had a "brown stain" on their teeth—and few cavities. In 1931, the water was shown to be high in fluorine.

Although leukemia shows a higher incidence among radiologists, there is no evidence that their occupation shortens their overall life span.

At least sixty physicians have served as governors in the United States . . . three of them as the first governors of a state or colony.

Significantly more women than men read medical news in nonprofessional media; and most of them read it in newspapers.

Capsule Clinics

- For several years the author has employed heparinized rather than citrated blood for exchange infusion of infants. The severe and occasionally fatal shock syndrome which is sometimes seen following use of citrated blood has not been observed in infants transfused with heparinized blood. Valentine, G. H., Canad. M.A.J. **78**:927, 1958.

- Psychotherapeutic influences are just as successful as the most complex medical regimens in treatment of recurrent abortion. Goldzieher & Benigno, Am. J. Obst. & Gynec. **75**:1202, 1958.

- Conjunctivitis occurred in 6 per cent of newborn infants treated prophylactically with Terramycin Ophthalmic Solution and in 46 per cent of infants who received 2 per cent silver nitrate solution. Mathieu, P. L., Jr., A.M.A.J. Dis. Child. **95**:609, 1958.

- Hormonal studies leave little doubt that "idiopathic" hirsutism is more properly categorized as a type of adrenal hyperfunction. Gallagher et al., J. Clin. Invest. **37**:794, 1958.

From Clinical Clippings, the Francis Roberts Agency, Inc.

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WASHINGTON

While the Keogh-Simpson measure for tax deferral by the self-employed passed the House easily the middle of March, there is still some question as to whether backers will push for hearings this year or wait until next session when the budget issue may be more settled. The bill provides tax deferment for self-employed up to $2,500 annually. The bill will stay alive even if it is not pushed in this session because a bill stays alive for the entire two-year term of a Congress, but must start all over again through the entire legislative process if not enacted at the end of a Congress. There are almost two entire sessions now for consideration of the measure in the Senate, unlike last year when Sen. Harry Byrd (D., Va.), chairman of the Senate Finance Committee, refused to set hearings on the House-passed bill on grounds that it was too late in the session. The bill is now in the Senate Finance Committee.

"The chiropractic lobby does not give up easily," says the Washington Report on the Medical Sciences. For years it has been seeking passage of a bill permitting veterans to utilize their services, on an outpatient basis, at government expense. Neither the House nor Senate has ever passed such a measure and a fresh try is being made in the present Congress. Sponsors of companion bills are Rep. Edith Nourse Rogers (R., Mass.) and Sen. William Langer (R., N. D.). Also a bill introduced in the Senate on March 2, S. 1227, would amend the Federal Employees' Compensation Act so as to permit injured employees to utilize the services of chiropractors. The bill would further modify the definition of "medical, surgical and hospital services and supplies" in the act to include services and supplies by osteopathic and chiropractic practitioners and hospitals as licensed by state law and within the scope of their practice as defined by state law.

At the present time hospitalization and medical treatment required by injured federal employees is given in Public Health Service hospitals. In the event such facilities are not available, hospitalization may be provided near the employee's place of employment and medical services rendered by private medical or osteopathic physicians who have been approved by the Medical Director of the Employees' Compensation Board.

A bill has been introduced to amend the National Defense Education Act of 1958 in order to promote the medical sciences by Senator Neuberger (D., Ore.). The bill would provide that interest would not accrue and repayment of loans would be deferred for up to five years for students serving in a hospital as an intern or resident physician. It would also provide for the cancellation of up to 50 per cent of the loan for physicians who perform full time service in medical research in a federal, public or nonprofit institution at the rate of 10 per cent per year.

Early in March the Congress completed action and sent to the President a four year extension of the peacetime draft, with provision for special pay for physicians, dentists and veterinarians beyond July 1. The bill as passed by the House did not include the extra pay provision but the Senate on recommendation of the Department of Defense added this new section and the House concurred.

"Solid progress" was the key phrase in the first report to Congress on A.M.A.'s program to improve the health care of the nation's aged population. Dr. Leonard W. Larson, chairman of the A.M.A.'s Board of Trustees, used the phrase in a letter to the chairman of the House Ways and Means Committee, Rep. Mills (D., Ark.), in which he said development of new insurance programs and expansion of existing lower cost protection for persons 65 and over are moving forward "even faster than many of us would have dared hope only a few months ago." The Ways and Means Committee also has before it H.R. 4700, the Forand bill.

At a conference of hospital construction authorities with Dr. Leroy E. Burney, Surgeon General, in March, it was recommended that the Hill-Burton Act be amended to allow larger federal grants for refresher training of hospital personnel, recruiting drives and other projects designed to improve patient care services, and to authorize ample financial aid to the states for administering Hill-Burton expansion and extend Hill-Burton grant eligibility to nonprofit mental health centers. It was also recommended that there be maximum appropriations to help finance hospital modernization and improvement in urban areas.

The Klamath Medical Service Bureau of Portland, Oregon, has asked the Supreme Court to review a lower court's decision that its payments to member physicians are not deductible as ordinary business expenses. Several weeks ago the 9th U. S. Circuit Court of Appeals denied petition for rehearing, following its affirmation of the U. S. Tax Court's ruling in the case, thus clearing the way for appeal to the Supreme Court. The doctors' contention is that the distribution among them as employees and stockholders of the corporate bureau, of $211,852 over a three year period was necessary compensation. The Appellate court held this to be, rather, a distribution of profits and taxable as such.

The amount of long delayed claims for payment of Medicare bills has reached a point at which the government is appealing to physicians and hos-

(Continued on page 529)

RESEARCH:

key to Kent's popularity

In 1958, Kent made the greatest gain in popularity ever recorded by any filter cigarette in any year—a sales increase of 20-billion cigarettes.

Behind this popularity is a story of months and years of research, perfecting the remarkable combination of filter action and flavor found in today's Kent cigarette. In developing Kent, Lorillard research scientists recognized that smokers wanted, on the one hand, a really satisfying taste; on the other, reduced tars and nicotine. In addition, smokers demanded a free and easy draw.

These, then, were the objectives. The first scientific breakthrough in the project was the development of the exclusive Micronite filter, patented by Lorillard. This filter was created because of newly-discovered principles in the field of filtration, which have been previously described in these pages.

Though this filter satisfied everyone on its ability to reduce tars and nicotine to the lowest level among the largest selling brands, there was still work to be done in the areas of taste and draw. After additional months of research, a new tobacco blend was developed which delivered rich taste *after* the smoke had passed through the filter. Next in the series of laboratory triumphs was a method of improving the draw to compare with the most free-drawing of all filter brands.

The rest of the Kent story is a legend in the tobacco industry. Outside, independent research studies confirmed the fact that Kent had achieved its objectives. Smokers responded. In fact, during the past year, more smokers changed to Kent than to any other cigarette in America.

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EXCLUSIVE MICRONITE FILTER

A Product of P. Lorillard Company—First with the finest cigarettes—through Lorillard Research!

Legislation Affecting the Practice of Medicine

T. R. O'Brien

Senate Bill 50, the joint licensure act to license doctors of medicine and osteopathy, was reported out of the Committee on Public Health and Welfare "Do Pass" on April 7. Dr. Raymond O. Muether, St. Louis, President-Elect of MSMA, appeared before the committee.

House Bill 1, Vendor legislation, has passed the House and is pending in the Senate Committee on Public Health and Welfare. Dr. John I. Matthews, Jefferson City, Secretary of the Missouri State Medical Association, appeared for the Association at a public hearing on March 24, and presented the following amendment:

"The Director of the Division of Welfare shall appoint an advisory committee to provide professional and technical consultation in respect to the medical care aspects for public assistance recipients as set out in this act. The committee shall consist of seven members, at least three of whom shall be physicians licensed to practice in this state, the others shall be persons interested in hospital administration, nursing home administration and nursing. The members of the advisory committee shall receive no compensation for their services other than expenses actually incurred in the performance of their official duties."

It is believed that the amendment will be accepted by the committee, if the legislation is adopted. Passage may depend upon the condition of the State Treasury.

Dr. Matthews pointed out the reasons for a medical advisory committee, calling attention to the many problems in determining when and whether hospitalization is required—what constitutes a medical emergency—what constitutes an acute serious illness, as opposed to chronic illness—when a patient is completely bedfast—what constitutes total disability.

He called attention to the fact that the ultimate responsibility for the care of the patient does and should rest with the physician. It is the physician who must determine whether hospitalization is required, whether the illness is acute and serious or whether a patient should be completely confined to bed.

For all these reasons a strong medical advisory committee is required not only for the benefit of the State Division of Welfare but also for the benefit of the recipients of public assistance who are eligible for benefits.

S.B. 24, pending in the Senate after approval by the Senate Committee on Public Health and Welfare, deals with the Chiropractic act. The bill increases the course in chiropractic from three years to four years, and alters the definition as follows: "The practice of chiropractic is hereby defined to be the science and art of *examining* for the purpose of *diagnosis* and adjusting the articulations of the human spinal column and *adjacent tissues* for the correction of the cause of abnormalities and deformities of the body."

The limiting definition now contained in the statutes "the art of *palpating* and adjusting *by hand* the *movable* articulation of the human spinal column" are greatly expanded by the proposed act. Note that it is proposed to include examining for the purpose of diagnosis—which implies all diagnosis—an apparent attempt to extend statutory practice rights. The words, *adjacent tissues,* may well spread the area of manipulation far and wide. The words *palpating* and *by hand,* obviously limiting words, are left out of the proposed new definition. Their elimination opens the door to use of instruments or machines and further weakens effective limitation on chiropractic practice.

S.B. 135, relating to radiation protection, is still pending in the Senate Committee on Public Health and Welfare. It is reported that the bill will not be seriously considered in this session.

S.B. 368, relating to the State Crippled Children's Service, is pending in the Senate Committee on Public Health and Welfare. The bill was introduced on the last day for submission of Senate bills, March 9.

At present, crippled children are referred by the various county courts to the state service when parents are unable to pay for treatment. The new act provides for the elimination of the court as a determining factor of indigency and authorizes the State Crippled Children's Service to make such determinations. The bill further provides that the state service may collect from parents of children who are able to pay for some but not all of the costs of treatment.

House Bill 232, dealing with the various state licensing boards, is still pending in the House. It was learned that a resolution to create an interim study committee was introduced on April 1. The Committee created will study the present legislation dealing with licensure and submit a report of its findings to the 1961 legislature. It was reported that with the passage of the resolution, H.B. 232 will be withdrawn from further consideration in this session.

House Bill 466, relating to immunization for poliomyelitis, was reported "Do Not Pass" by the House Committee on Education.

B. I. D.

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Across Missouri

Traffic safety, a subject vying with international situations in interest and attention today, is receiving its share of concern in the Missouri legislature. The raising of the gasoline tax for better roads, the point system measure and several other bills are directed principally toward greater safety.

For greater safety from better roads the improvement and results in the traffic safety record on Highway 66 is a clear example. During the last five years in which time the highway has been widened, curves and hills have been made less deadly, the accident rate has dropped 19 per cent from the rate of 1954. The accident rate per miles traveled has declined 24 per cent.

In Connecticut a single speeding conviction brings a 30-day license suspension. Nothing so drastic as the Connecticut license suspension plan is before the 1959 Missouri legislature and the measures that are before the legislative bodies have come from the legislators themselves instead of the highway patrol or outside interests.

The point-system measure, which has aroused quite some organized opposition, would provide that a certain number of points would be credited against motorists convicted of specific violations. Eight points within 18 months would mean a 30-day suspension. Twelve points within a year or 18 within two years bring a 6-month suspension. A speeding conviction would be two or four points and drunken driving would mean a loss of 12 points.

Insurance rates enter the picture of traffic safety. Rates in Missouri went up recently, while in Iowa, six months after a point system was enacted, the death rate dropped 37 per cent and some time later insurance companies reduced rates as much as 9 per cent.

LIBRARY FACILITIES

In 1942 Platte County set up the first county library in the state and since that time 54 other counties have done so and eight regional libraries have been established. It is estimated, however, that 59 counties still lack adequate book service. Gasconade, Warren, Howard, Boone and Callaway voted in April on county libraries.

COMMITTEE ON LEGISLATIVE RESEARCH

The eighth biennial report of Missouri's Committee on Legislative Research marks the agency's 16th anniversary. In 1943 Sen. R. Jasper Smith of Springfield, now a federal district judge; Sen. Frank Briggs of Macon, later a United States senator; Sen. Francis Smith of St. Joseph, now in private law practice, and Rep. Floyd Gibson of Independence, now president pro tem of the Missouri Senate, worked toward establishment of the permanent committee. The committee furnishes expert staffs and research for interim legislative committees, drafts bills, conducts specific studies, checks measures for conformity and legality and conducts continuous reviews of the statutes.

NEWEST STATES

Missouri remained the newest state in the United States for a period of 15 years, as compared with Alaska's very short time of being the newest state. It took 49 years for the admission of the first 25 states, then 123 years for the next 25 states to enter. Missouri was admitted as a state in 1821 and the neighboring State of Kansas was admitted at the outset of the Civil War, in 1861. During the 20th century, Oklahoma became a state in 1907 and both Arizona and New Mexico in 1912. With Alaska and Hawaii entering in 1959, it equals the year of 1912 but in 1889 four states entered the union, North Dakota, South Dakota, Montana and Washington.

MISSOURI'S SPENDING

Recently a Congressional Quarterly gave data on per capita state spending for the fiscal year of 1957. It showed that Missouri ranked 44th among the states in expenditures for higher education, 38th in spending for highways, 6th in spending for public welfare. Missouri pays $30 per capita for public welfare while Kansas pays $22.50 and Illinois $16.32.

BILLS IN THE LEGISLATURE

There were 940 bills before the Missouri legislature at this session, 56 being introduced on the last day for introduction of bills. The Senate accounted for 368 of the proposed bills and the House sponsored 572 measures.

STRONTIUM 90

The United States Public Health Service has been determining the quantity of strontium 90 in milk in the St. Louis area since April 1957. The first report showed a content of 6.5 strontium 90 units. The second, in September 1958, revealed a jump to 15.4 units, the highest among nine areas then under study. The most recent report, for the last quarter of 1958, showed 12.2 units in October, 20.1 in November and 15.6 in December.

TAXES

Missouri is not the only state which has under consideration various taxes to meet mounting expenses. In 28 of the 43 states which have legislatures meeting this year, tax rises have been recommended by the governors. Missouri is one of 12 which has considered a gasoline tax rise. Tobacco and liquor tax rises are sought in many states, including Missouri.

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References: 1. Charles, C. M.: Geriatrics 2:110 (March) 1956. 2. Menger, H. C.: Clin. Med. 4:313 (March) 1957. 3. Shuster, B. H.: M. Clin. North America 40:1787 (Nov.) 1956.

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Missouri Academy of General Practice

John F. Pearl, M.D.

FOURTH ANNUAL SPRING CLINICAL CONFERENCE

The fourth annual Spring Clinical Conference at the University of Missouri, jointly sponsored by the University of Missouri School of Medicine, the Missouri Heart Association and the Missouri Academy of General Practice, will be held May 13 and 14. There is no registration fee and is acceptable for a maximum of 12 hours of Category I postgraduate credit. All members of the Missouri State Medical Association are invited as well as members of the Missouri Academy of General Practice.

PROGRAM

Wednesday, May 13, 1959

P. V. SIEGEL, M.D., Smithton, Presiding.

8:00 a.m. Registration.
9:00 a.m. Welcome, Roscoe Pullen, M.D., Columbia, Dean, University of Missouri School of Medicine.
9:05 a.m. Diuretic Therapy, G. Thorpe Ray, M.D., Columbia, professor of medicine.
9:40 a.m. Coffee Break.
10:00 a.m. Amebiasis, Harold W. Brown, M.D., New York, professor of parasitology, College of Physicians and Surgeons, Columbia University.
11:00 a.m. Panel: Current Concepts of Diabetic Therapy.
Moderator:
Robert L. Jackson, M.D., Columbia, professor of pediatrics.
Panelists:
Randall G. Sprague, M.D., Rochester, professor of medicine, Mayo Foundation.
Thomas W. Burns, M.D., Columbia, associate professor of medicine.
12:30 p.m. Lunch. Panel of Experts, H. O. Loyd, M.D., Moderator.
Jacob S. Roden, M.D., Columbia, presiding.
2:00 p.m. Pathogenesis of Peptic Ulcer, S. Arthur Localio, M.D., professor of clinical surgery, New York Post-Graduate School, New York, N. Y.
3:00 p.m. Coffee Break.
3:15 p.m. Panel: Cardiac Surgery.
Moderator:
Kenneth K. Keown, M.D., Columbia, professor of anesthesiology, University of Missouri.
Panelists:
S. Gilbert Blount, M.D., Denver, cardiologist, University of Colorado Medical Center.
Theodore E. Keats, M.D., Columbia, associate professor of radiology, University of Missouri.
Jack M. Martt, M.D., Columbia, assistant professor of medicine, University of Missouri.
Hugh E. Stephenson, Jr., M.D., Columbia, professor of surgery, University of Missouri.
7:00 p.m. Annual Dinner Meeting of the Missouri Heart Association, Tiger Hotel, Columbia. E. E. Glenn, M.D., Springfield, presiding. Speaker, S. Gilbert Blount, M.D., Denver.

Thursday, May 14, 1959

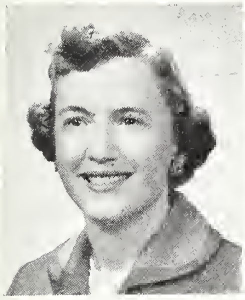
WYETH HAMLIN, M.D., Hannibal, presiding.

9:00 a.m. Demonstration and Panel: The Cardiac Surgery Program of the University of Missouri Medical Center.
Moderator:
William H. Wade, M.D., Columbia, assistant professor of surgery, University of Missouri.
Panelists:
Owen A. Kearns, M.D., Columbia, associate professor of preventive medicine, University of Missouri.
Vincent P. Perna, M.D., Columbia, assistant professor of pathology, University of Missouri.
10:00 a.m. Coffee Break.
10:15 a.m. The Diagnosis and Management of Rheumatic Fever, S. Gilbert Blount, M.D., Rochester.
11:15 a.m. Panel: The Management of Peptic Ulcer.
Moderator:
J. Ned Smith, M.D., Columbia, assistant professor of medicine, University of Missouri.
S. Arthur Localio, M.D., New York.
Robert H. Barnes, M.D., Columbia, clinical associate in psychiatry, University of Missouri.
Gwilym S. Lodwick, M.D., Columbia, professor of radiology, University of Missouri.
12:30 p.m. Lunch. Panel of Experts, C. S. Anast, M.D., Columbia, Moderator.
Owen A. Kearns, M.D., Columbia, presiding.
2:00 p.m. Diabetic Acidosis, Randall G. Sprague, M.D., Rochester.
3:00 p.m. Panel: Parasitology.
Moderator:
Vincent P. Perna, M.D., Columbia.
Panelists:
Harold W. Brown, M.D., New York.
Clement E. Brooke, M.D., Columbia, assistant professor of pediatrics, University of Missouri.
Michael H. Ivey, Ph.D., Columbia, assistant professor of microbiology, University of Missouri.

The Woman's Auxiliary

Mrs. Stanley S. Peterson

As we look ahead to the new Auxiliary year and make plans to continue our varied activities, we also look backward to the fine year behind us. Under Esther Bauman's friendly, capable direction doctors' wives in Missouri have accomplished many things for the medical profession, and for the public.


Mrs. Stanley S. Peterson

For the last several years we have used a Point System Report for a guide in planning our activities for the year. Points are given for keeping up membership, sending in reports promptly, attendance at the Convention and Fall Board meeting. Additional points are given for being good citizens in our communities—being registered voters, contributing time to United Fund and "health" drives, and for establishing GEMS programs (Good Emergency Mothers Substitutes, a trained baby sitter project).

One of our major interests is the American Medical Education Foundation, and we have set our goal for this year at $1.00 per member. The county auxiliaries have devised many unique ways to raise this quota, from traveling food baskets to gifts honoring doctors on Doctor's Day to style shows and benefits.

Another important project has been the attempt to place *Today's Health* in all doctors' and dentists' offices, as well as subscribing for ourselves, giving gift subscriptions and selling the magazine to the public. Our quota, which was set by the National Chairman, was 1,690 for this year, and by early in March we had attained 91 per cent of our goal.

In order to encourage more young men and women to enter nursing and other paramedical careers many auxiliaries have established loan or scholarship funds. One county was cosponsor of a showing of the recruitment film, "Helping Hands for Julie," for members of the junior auxiliaries of three hospitals and the future nurses clubs of the high schools. The cochairman of our Recruitment Committee, Mrs. A. P. Stephan, is our representative on the Missouri Council on Health Careers.

With the international situation remaining tense, Civil Defense is a major interest, and this year we have stressed the fact that in a civil or natural emergency, the doctor's wife is likely to be left alone with her family while her husband takes his assigned post in the community, and have urged every member to take a first aid course, equip her home with emergency food and water supplies and a complete first aid kit.

Programs designed to promote better public relations have been many and varied. As a friendly gesture at Christmas time, one group baked cakes for each ward of a rest home, and presented each elderly person with his own small poinsetta plant at the party. Think of the joy that must have brought to those shut-ins.

Through at least one comprehensive report on health legislation during the year we strive to keep abreast of what is being done in Congress and the state legislature which affects doctors personally and professionally, and the health of the public in general. Most auxiliaries have these reports monthly.

A number of radio and television stations throughout the state are supplied with films and transcriptions on health subjects, and have been most generous in giving time for these programs.

Each Auxiliary has tried to have a program on "Safety and Mental Health," either for their own meetings or for an open meeting for the public, at which a qualified speaker has discussed the subject, or films have been shown.

Obviously, this is such an extensive over-all program that all auxiliaries, particularly the smaller ones where the few members are scattered in many separate communities, cannot carry out all facets of the program. Many of them concentrate on one or two big projects as a group, and then are active in their own town's health and school organizations. However, many of the auxiliaries do try to score points in all phases of the program, and at the State Convention all of those scoring 100 per cent and over are awarded certificates. The auxiliaries are divided into four classes according to membership: Class I, up to 15 members; Class II, 16-30 members; Class III, 30-75 members, and Class IV, over 75 members. The president of the winning auxiliary in each of these classes is awarded a money corsage, to be added to her group's treasury. The auxiliary with the highest score is awarded a lovely gold cup, which it is entitled to hold for a year.

It can be readily seen that the Point System serves as a guide and inspiration to officers and chairmen in planning the events of the coming year. Each year a few changes are made in the scoring for the different activities, reflecting the emphasis being placed that particular year on certain projects.

At the time this is being written, the grading for this year has not been completed, and we will all be looking forward to the Tuesday luncheon at the

(Continued on page 586)

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Spontaneous Internal Biliary Fistula

NORMAN R. WALL, B.A., AND GRAFTON A. SMITH, M.D., *Columbia*

THE SPONTANEOUS occurrence of internal biliary fistula, usually concurrent with biliary tract disease, is a most serious and difficult problem. The added complications of ascending infection, hemorrhage or gallstone ileus among these patients urge surgical corrections; but the mortality rate is often discouraging. These occurrences can be avoided with earlier recognition of the fistula if proper diagnostic procedures are applied. The earlier treatment of gallbladder disease and a continued curiosity as to the possibility of these internal biliary fistulae are the only tools at our disposal for further improving the results in the management of these unfortunate patients.

These thoughts and the experience with spontaneous internal biliary fistula occurring seven times among the first one hundred patients with operation upon the biliary tract in this hospital suggested a need for this study.

INCIDENCE AND ETIOLOGY

Internal biliary fistulae usually occur in the following order: cholecystoduodenal, cholecystocolic, choledochoduodenal, and cholecystogastric with rarer instances of the other types shown in table I. These fistulae are usually recognized during the sixth or seventh decade of life, and women are affected more often than men in a ratio of about two or three to one. This might be expected since all gallbladder disease has a similar sex distinction.

The occurrence rate of these fistulae has varied in

TABLE I

INCIDENCE OF INTERNAL BILIARY FISTULA

Fistula Type	*Waggoner*[22]	*Epperson*[8]	*Dean*[7]	*Mirizzi*[16]	*Univ. of Missouri*	*Total*	
						Cases	*Per Cent*
Cholecystoduodenal	418	64	24	53	4	563	59.60
Cholecystocolic	172	7	1	9	1	190	20.10
Cholecystogastric	*	6	1	8		15	1.60
Cholecystogastroduodenal	*	2		2		4	0.48
Cholecystoduodenocolic	*	3		1		4	0.42
Cholecystogastrocolic	*			1		1	.10
Choledochoduodenal	156	3	1		2	162	17.20
Cholecystocholedochal	*			1		1	.10
Cholecystohepaticocholedochal	*			1		1	.10
Cholecystocholedochal duodenal	*		1	1		2	.20
Cholecystohepaticoduodenal	*			1		1	.10
Total Cases	746**	85	28	78	7	944	100.00

* These categories were not enumerated in their report.
** A total of 819 cases were reported, but only 746 were clearly described.

(NRW) Third Year Medical Student, University of Missouri Medical School.

(GAS) Assistant Professor of Surgery, University of Missouri Medical School.

the experience at different centers. Roth, Schroeder and Schloth[20] found only forty-three internal biliary fistulae in 10,866 autopsies, while Puig-Sureda[19] calculated an over-all incidence of 0.22 per cent (range 0.11 to 0.39) in a total of 66,340 necropsies in which gallstones were found. Puestow[18] found an incidence of 3.5 per cent among all gallbladder operations; and Hicken and Coray[12] reported an incidence of 4.2 per cent of fistulae in similar cases. The rate at this center was 7 per cent.

Most biliary fistulae are single. Among 142 cases of gallbladder fistulae reported by Wakefield, et al.,[23] there were only eleven instances of multiple fistula. Of the cases seen here, six were single fistulae and in the remaining case there was both an external biliary fistula and a choledochoduodenal fistula.

Gallbladder disease is the underlying cause of most internal biliary fistulae. The cholecystoduodenal fistula, a most common type, develops secondarily to benign cholecystic disease and occurs rarely without stones. Formation begins with cholecystitis followed or preceded by a cholelithiasis and subsequently pericholitis with adhesion formation. A trapped stone can then cause pressure necrosis and erosion with the formation of a fistula. Gallstones are the cause in 90 per cent of all cases, while perforating peptic ulcer (6 per cent) or carcinoma (4 per cent) also can be the offending agent.[12]

A peptic ulcer as the second most common cause of fistula formation is stressed by Garland and Brown.[10] They reviewed 90 cases of choledochoduodenal fistula and found 29 per cent were caused by peptic ulcers. These occur commonly in the fourth decade of life.

A third cause of fistula formation is cancer. It is associated most frequently with a cholecystocolic fistula. Murcheson[17] found this to be the case in six of nine such patients; but Borman and Rigler[3] found only one of six was associated with a carcinoma.

COMPLICATIONS

The most frequent complication of internal biliary fistula is bacterial infection. Fistulae can allow regurgitation of gastrointestinal contents into the biliary tract with subsequent development of cholangio-hepatitis. This is usually recurrent and in time may produce widespread intrahepatic scarring or abscess formation. However, at the Mayo Clinic in one series of 98 patients operated on by Walters, et al.,[24] for stricture of the hepatic or common duct, 34 choledochoduodenostomies were performed. A follow-up of these patients showed that 82 per cent were alive and well when last heard from. Here and elsewere, however, closure of the fistula and re-establishment of normal drainage have effectively controlled this complication. Finally, cholecystocolic fistula could, of course, subject the biliary system to a higher degree of biliary contamination than would be likely to come from the stomach or the upper reaches of the small intestine.

Gallstone ileus is a frequent secondary complication of biliary fistula. Most stones enter through a fistula. In a study of 30 fatal cases of gallstone ileus, a fistula between the gallbladder and duodenum was found 28 times.[6] Other reports cite a varying incidence of these intestinal obstructions (0.3 per cent and 6.6 per cent).[2, 9]

Another complication, internal hemorrhage caused by an eroding gallstone, can give rise to severe blood loss. This occurs when a stone passes through a fibrous adhesion and erodes a large blood vessel of the bowel at the site of passage. This serious complication, along with the other major degenerative diseases commonly found among these aged patients, can tax the judgment of the most experienced surgeon.

DIAGNOSIS

Internal biliary fistula can be diagnosed best by x-ray; however, the clinical history is an important adjunct. Fistulae are more common in women and in the sixth decade of life. Usually there is a history of long standing cholecystic disease. Of particular diagnostic significance is relief of obstructive biliary symptoms followed by gastrointestinal symptoms. This occurs at the time of fistula formation and is frequently accompanied by a weight loss. There can be an intermittent jaundice produced by alternate fistula formation and spontaneous closure. Here biliary colic is common, as are fever, chills, dull epigastric pain, dyspepsia, nausea and vomiting. Gallstones may have been vomited, passed per rectum, voided or coughed up. Intolerance to fatty food, and either constipation or diarrhea may be seen, the latter depending upon the more distal location of the fistula. The most silent internal biliary fistulae clinically are choledochoduodenal in nature, especially when secondary to a penetrating duodenal ulcer.[17]

Physical examination may be of little help but with infection there can be abdominal rigidity, muscle rebound of a palpable abdominal mass; and, possibly, signs of gastrointestinal obstruction if a stone has lodged in the lower reaches of the bowel.

Laboratory determination of liver function for assessment of liver damage should also be done; however, x-ray study is the most helpful aid in diagnosis of these fistulae. The first x-ray diagnosis of internal biliary fistula was made in 1915 by Hunt and Herbst.[13] A review of 267 case by Borman and Rigler[3] in 1937 showed only 86 had been diagnosed by the roentgenologist. They also offered a helpful outline of x-ray diagnosis:

1. Direct signs:
   a. Gas, air, or barium in the gallbladder or biliary tree (see figs. 1 and 2).
   b. Mucous membrane changes at the stoma of the fistula.
2. Indirect signs:
   a. Nonfunctioning gallbladder (cholecystogram).

In the true fistula, portions of the intrahepatic biliary tree are usually filled with barium and thus visualized roentgenographically (see fig. 3). In the reflux cases this rarely occurs, but barium can be seen in the distal portion of the common duct. This incompetency of the sphincter of Oddi is most commonly caused by passage of a large stone through the ampulla. Chronic pancreatitis may also be related to an incompetent sphincter, and temporary incompetence may follow cholecystectomy.[1] The pattern of the bowel wall upon barium regurgitation can be helpful in clarifying the diagnosis. Mucous membrane changes attending a fistula show irregularity, indistinct folds and a loss of elasticity.

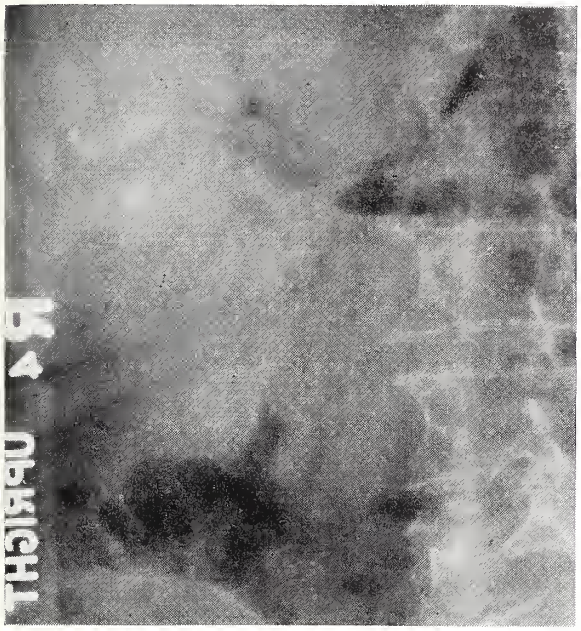

Fig. 1. Cholecystoduodenal fistula. A flat plate of the abdomen showing air in the biliary tree, and was interpreted as choledochoduodenal fistula (Case 4).

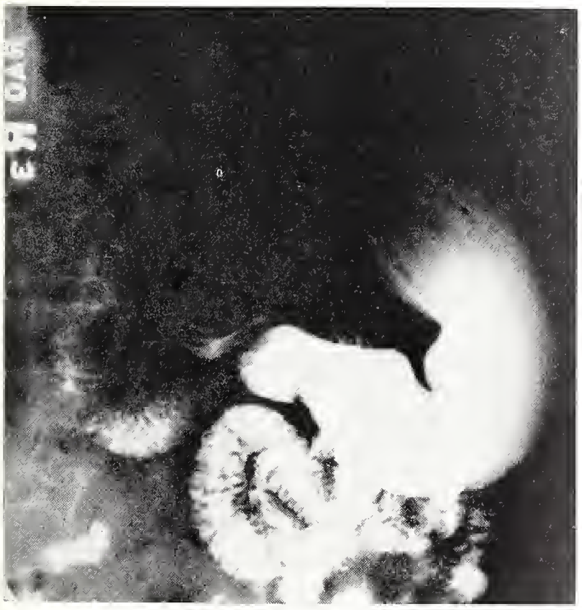

Fig. 2. Cholecystoduodenal fistula. Barium is seen filling the gallbladder following an upper gastrointestinal series (Case 4).

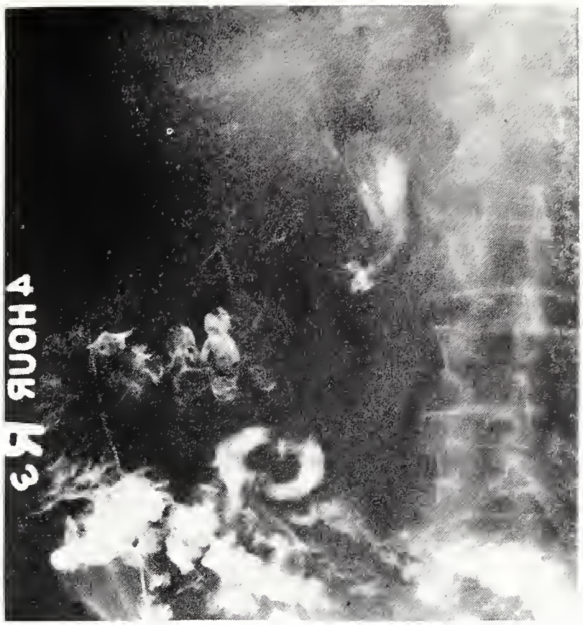

Fig. 3. Cholecystoduodenal fistula. Barium is seen in the intrahepatic ducts at four hours following an upper gastrointestinal series film (Case 4).

CLINICAL MATERIAL

This series includes seven patients with internal biliary fistula operated upon at the University of Missouri Medical Center since January 1956. Five remain living and well. Two deaths have occurred among these seven cases. One death was due to septicemia attending an ascending cholangitis and one was due to a superior mesenteric thrombosis in a patient with gallstone ileus and generalized arteriosclerosis. The cases are reviewed.

CASE REPORTS

Case 1. A. B. B., a 75 year old negro female, was admitted with a diagnosis of biliary enteric fistula. She complained of anorexia, occasional pain in the right upper quadrant which sometimes radiated down her right leg. The bowel habits were irregular with passages every three to seven days. She sustained a 30 pound weight loss in the last year. Physical examination showed a diffuse right upper quadrant tenderness and a 4 cm. mass was felt in the epigastric region. Laboratory work was within normal limits except a reactive VDRL. Oral cholecystogram and upper gastrointestinal series showed (1) no visual gallbladder, (2) no opaque calculi, (3) air in the biliary tree and (4) the common duct filled with barium. The patient refused surgery, but she returned shortly following discharge with severe vomiting and a slight urinary infection. There had been a further 9 pound weight loss.

At operation, a small fibrotic gallbladder was exposed through numerous adhesions. No patent fistula was present; but a densely adherent area, which had represented one, was found. The gallbladder was removed and the common duct explored and dilated. A stone at the ampulla was removed. A T-tube was left in the common duct and the abdomen closed. The patient tolerated the procedure well and made an uneventful recovery.

Comments: The symptoms point to the biliary tree with a classically long history of right upper quadrant pain. The x-ray findings were diagnostic of internal biliary fistula, and the surgical finding of a stone established cholelithiasis as the causative factor.

Case 2. A. W., a 72 year old white man, entered the hospital with substernal and epigastric pain of two and one half months duration which was accompanied by nausea and vomiting. The pain was exaggerated by fatty food. The stools were light in color with no evidence of blood. There had been a 40 pound weight loss during the last six months.

Physical examination showed a protuberant, symmetrical abdomen. Abdominal tenderness was most severe over the upper quadrants. The lower extremities showed an absence of posterior tibial pulse, and an only slightly palpable, dorsalis pedis pulse. Laboratory work indicated the presence of a urinary infection, diabetes mellitus, and an electrolyte imbalance. An upper gastrointestinal series was negative. Four days later a scout film of the abdomen showed a small bowel obstruction but no other evidence of a gallstone ileus. Suddenly, the lower extremities became pulseless and pale. The patient was in terminal condition. It was decided that a bilateral femoral embolectomy should be performed, but despite treatment, the patient died on the operating table. Autopsy showed superior mesenteric artery thrombosis, small bowel obstruction and peritonitis with a 4.5 cm. stone in the ileum 65 cm. from the ileocecal valve. An unsuspected 1 cm. fistula was found between the gallbladder and the first portion of the duodenum.

Comments: This history, again, is typical; but the simultaneous occurrence of mesenteric thrombosis was indeed unfortunate. However, vascular and other diseases do occur frequently among this group of aged patients. Also, as shown here, these fistulae can escape recognition even when appropriate studies such as a scout film of the abdomen and upper gastrointestinal series are applied.

Case 3. E. D., a 50 year old white man, was admitted with epigastric fullness after meals, epigastric pain sometimes relieved by vomiting, and severe night pain relieved by anacids. Fifteen years previously he developed attacks of hematemesis and melena which had recurred intermittently. The few weeks prior to admission he had, at intervals, alternate episodes of tarry and then, clay-colored stools. The physical findings were right upper quadrant tenderness and rigidity. The laboratory studies were within normal limits. An upper gastrointestinal series showed a duodenal ulcer with partial gastric obstruction. At operation it was found that the ulcer had eroded into the common duct just proximal to the ampulla of Vater. Adhesions in the area were dense but it was possible to close the opening in the common duct over a T-tube. A polyethylene catheter was then inserted into the main pancreatic duct. The patient tolerated the procedure well. He was discharged on the nineteenth postoperative day after an episode of gastrointestinal bleeding which responded to vitamin K therapy and whole blood.

Comments: Here, again, is an ulcer as the primary cause of choledochoduodenal fistula. The patency of both common and pancreatic duct were assured only by cannulation in this case.

Although rare, the recognition and closure of the fistula must be accomplished at primary surgery. Later closures are almost always unsatisfactory.

Case 4. G. A., a 75 year old white female, was admitted with intermittent abdominal pain of 14 years duration. These attacks of pain occurred periodically at two to four week intervals in association with nausea and vomiting. During the preceding two years these attacks had become more frequent. Previously, stones had been removed from both kidneys and the patient had mild diabetes mellitus. There had been a recent 40 pound weight loss. Physical examination showed the liver to be five fingerbreadths below the right costal margin, and tender. The laboratory studies showed a slight anemia, a differential with a slight shift to the left, evidence of a urinary infection, and liver malfunction. A flat plate of the abdomen showed air in the biliary tree suggesting choledochoduodenal fistula (see fig. 1). Upon doing an oral cholecystogram the gallbladder did not visualize, and an upper gastrointestinal series showed barium in the gallbladder (see fig. 2). The four hour films showed barium in the intrahepatic ductal system (see fig. 3). Exploratory laparotomy showed an obliterated gallbladder, a greatly dilated common duct containing several large stones, and a fistulous communication between the gallbladder and duodenum. The biliary tract was extensively explored with removal of all stones. The gallbladder remnant was removed, the fistulous opening closed, and a T-tube was left in the common duct. Postoperatively, a severe septicemia developed and despite intensive antibiotic and supportive treatment, the patient expired on the third postoperative day.

Comments: This case points out the x-ray finding of a nonfunctional gallbladder, the common occurrence where a fistula is present. Further, all x-ray studies were diagnostic here. The serious nature of this type of operation in the face of even a mild infection and liver damage can be disastrous.

Case 5. M. B., a 61 year old female, was admitted following an incidental finding of internal biliary fistula as shown on a flat plate of the abdomen. This was confirmed by an upper gastrointestinal series (see fig. 4). A barium enema was negative. At exploratory laparotomy, a fistula between the fundus of the gallbladder and the second portion of the duodenum was found. The gallbladder was removed and the common duct was explored and dilated. The duodenostomy was closed with interrupted silk sutures and a T-tube remained within the common duct. Postoperatively there developed a low grade fever, paralytic ileus, and mild oliguria of two days duration. Then the patient improved steadily and was discharged on the sixteenth postoperative day.

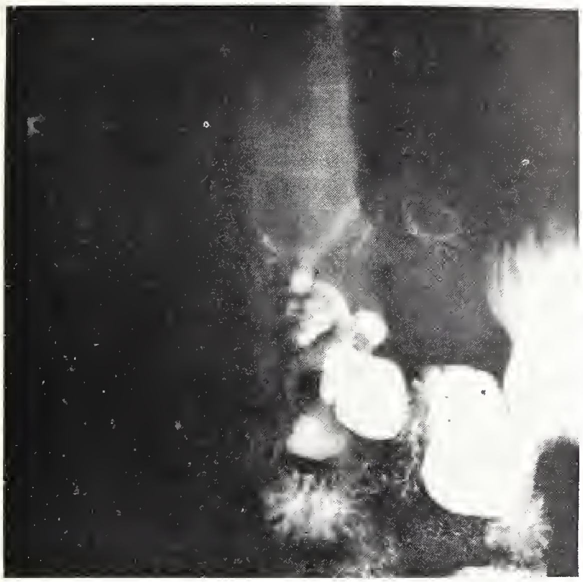

Fig. 4. Cholecystoduodenal fistula. After a scout film showed air in the biliary tree, upper gastrointestinal series showed barium to fill the common, hepatic and intrahepatic ducts (Case 5).

Comments: An incidental finding upon x-ray examination led to the diagnosis of a fistula in this case. Many such fistulae are first diagnosed in this manner.

Case 6. J. W., a 66 year old white farmer, was admitted with intermittent episodes of right upper quadrant pain, abdominal distension, vomiting and fever of many years duration. The diagnosis of internal biliary fistula was made at another hospital by x-ray examination. At this hospital, a sub-diaphragmatic abscess was aspirated, and later incision and drainage of 1,000 ml. of pus was done. An external biliary fistula formed. The patient was discharged and then readmitted four months later. Physical examination at that time showed a firm, non-tender liver to be 2 cm. below the right costal margin. A 10 by 4 cm. defect remained posteriorly and continued to drain bile. Ascites was present. The sclera were slightly icteric. X-ray examination showed an internal and an external biliary fistula (see fig. 5). The laboratory data showed impairment of liver function. At operation, an external fistula was found to be connected to a small fibrosed gallbladder which was surrounded by dense adhesions. Also, a widely patent fistula was found between the distal common duct and the first portion of the duodenum. Scarring in this area suggested the possibility of a chronic duodenal ulcer. A cholecystectomy was done and the fistula was allowed to remain since it was widely patent. A T-tube was left in the common duct. The abdomen was closed, and the patient withstood the operation well. After a stormy postoperative course, he was discharged four weeks later.

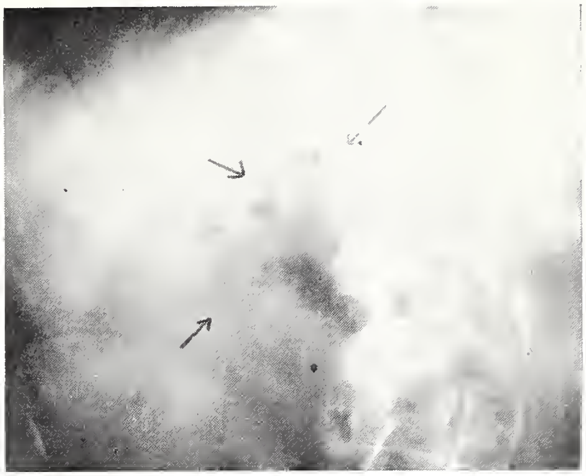

Fig. 5. Cholecystocolic fistula. Air is seen in the biliary tree and was proved to be caused by a cholecystocolic fistula found at surgery (Case 7).

Comments: Although the history was fairly typical, the diagnosis was made by x-ray examination. The site of the internal fistula in this case could suggest that the primary etiology was a duodenal ulcer and that the external fistula resulted from a perforation of the gallbladder. As shown here, the extent of surgery should be governed by the general condition of the patient.

Case 7. J. D., a 69 year old white female, was admitted with an incidental finding of internal biliary fistula as shown by flat film of the abdomen. There was a five year history of right upper quadrant pain, which radiated around the right side and was heightened upon eating fatty foods. Stones were passed per rectum seventeen years previously. At laparotomy a fistula was found between the fundus of the gallbladder and the transverse colon. The defect in the colon was closed and cholecystectomy and common duct exploration were performed. A T-tube was left in the common duct. This procedure was well tolerated but the patient developed subhepatic abscesses which later required drainage. Thereafter she steadily improved and was discharged on the twentieth postoperative day.

Comments: Another incidental x-ray finding diagnosed this case. A history of stones passed per rectum gives firm indication that the fistula was formed at that time; in fact, it is almost diagnostic. Although this was a cholecystocolic fistula, the patient did not show the severe cholangitis and liver damage that could have been suspected. A possible explanation lies in the fact that the fistula may not have been patent at all times. The occurrence of a complicating sub-hepatic abscess was undoubtedly related to the exploration and closure of the colon.

TREATMENT

Surgery is the treatment of choice in cases of internal biliary fistula, but this choice must be made with studied care since these patients are frequently poor risks. In fact, in some quarters, if a fistula is causing no symptoms of ascending cholangitis or liver damage, it is recommended that the patient should probably be followed and operation delayed until such time as symptoms demand it. Actually, the persistence of a fistulous opening would, in itself, suggest some degree of obstruction to the flow of bile through the ampulla of Vater and causing the continued drainage by an abnormal route. Epperson and Walters[8] reported that among 45 patients with fistula and duct exploration the presence of stones was encountered 29 times. The probable presence of these stones and the intermittent closure of the fistula with its attendant stasis and infection should suffice to warrant early surgery in these better risk patients. Among the symptomatic patients the risk is considerably greater. These patients frequently develop dehydration, acidosis, toxemia, hypoproteinemia, all combined with the possible existence of cholangitis, pancreatitis or biliary obstruction. In addition, there can be a severe depression of all essential liver functions. A carefully planned preoperative preparation must be accomplished before these patients can safely assume the added burden of an operation. To ignore complete preparation of the patient is to invite high morbidity and mortality rates. The previously reported mortality rate of 10 to 50 per cent[7, 15, 18] can be bettered only by early surgery when all complications are suspected and complete preoperative preparations are applied.

The death rate is most frequently related to infection or hepatic insufficiency. The occurrence rate of infection warrants the administration of high dosages of appropriate antibiotics for a period of 48 hours before surgery if the patient has any evidence of a septic course in the recent past. Further, vigorous cleansing of the bowel by purge, enemas and oral antibiotics should be followed in all cases, but especially so when the lower bowel could be involved. Should localized pus be encountered at the time of celiotomy, simple drainage is more preferable than extended vigorous dissection. Also, if the dissection has compromised the colon in cases of active infection, a double-barreled colostomy is preferable to a primary anastomosis. Actually, an active severe inflammatory reaction involving the colon could be treated by an ileocolic by-pass procedure, drainage of the abscess, and later subsequent definitive correction. These thoughts have dealt with some of the problems of associated extrahepatic pathology; but ascending cholangitis and liver failure may be improved only by a direct attack and correction of the abnormal fistula and any other related biliary tract disease.

No single operation can be employed to correct all biliary fistulae. The remedial procedures depend on the viscera involved, the size and location of the fistulous orifices, and the presence of obstructive pancreatitis, cholangitis, sub-hepatic abscess, or choledochal stone. Each case must be individualized. However, the sequence of these operations should follow a definite pattern of complete abdominal exploration with suspicion directed toward the occurrence of gallstones, peptic ulcers or the presence of a neoplasm. The procedure could include a complete operative cholangiographic visualization of the biliary tract by injection of diodrast directly into the fundus of the gallbladder or an accessible radical. The diodrast, upon escape into the gastrointestinal tract, would then outline the fistulous opening.[12] A fine needle inserted through the head of the pancreas will quickly differentiate a neoplasm from a stone when the tip of the needle grates against the calculus. Further, a distinctly palpable pancreatic duct should signal the presence of a primary neoplasm. Next, when practical, the biliary ductal system should be carefully explored. Here a gallstone at the ampulla can frequently be removed, especially among patients with cholecystoduodenal fistulae. In addition, a partial stricture of the common duct or the presence of a peptic ulcer presents special mechanical problems.

The repair of either a stricture of the major ducts or severance of these structures are preferably managed at the earliest possible time. A primary duct-to-duct anastomosis distal to the insertion of a T-tube is to be preferred. Later, if there is recurrence of obstruction, the duodenum or jejunum can afford the site of anastomosis. When ductal continuity cannot be established, a choledochoduodenostomy can be most easily accomplished and offers satisfying results.[24] If cholangitis occurs, then a Roux-en-Y jejunal anastomosis could be helpful.[5] Fortunately, a serious stricture of the biliary radicals is not a prevalent finding; and closure of the common duct over a T-tube will usually suffice.

The management of a common duct fistula caused by a peptic ulcer should be determined by the other existing complications. At times, among the very ill patients, a choledocotomy or cholecystomy is done to relieve the jaundice and assist the liver to recovery before extending the operation further.[12] However, in the presence of choledochal obstruction, severe cholangitis and impaired hepatic function it would be much better that the common duct be opened, the offending calculae removed and a catheter for drainage employed. In such cases it is best that the ulcer and fistula not be molested. The ulcer may then heal, but a remedial Bilroth II type of gastric resection may be necessary when the patient's condition improves. In either event the fistulous tract should close spontaneously over the T-tube and adequate drainage would occur through the ampulla of Vater. If a stone was found in the distal duct, the usually stone-laden gallbladder should be removed. This staging of the surgical operations is precluded if the patient's condition warrants an extensive operation. Under this circumstance, various surgical procedures have been suggested. Gray and Sharpe[11] advocate partial gastrectomy and cholecystectomy, together with excision of the choledochoduodenal fistula. Also, these fistulae might be treated by partial gastrectomy, partial duodenectomy and separation of the fistulous opening combined with cholecystoduodenal anastomosis.[21] Others[4] have used a method whereby the first part of the duodenum is mobilized and transected; subsequently the distal end is closed and inverted to allow an end-to-side anastomosis between the proximal end of the duodenum and the jejunum either in front of or behind the transverse colon, thus the entire stomach can be preserved. However, exclusion of the duodenum by a Bilroth II type of gastrectomy would seem preferable.

In the one operation on cholecystocolic fistula performed here, the treatment was cholecystectomy, exploration and dilatation of the common duct, and excision and closure of the fistula. This is in general agreement with the experience of others. [12, 15, 18] Of course, the best treatment of internal biliary fistula is its prevention by removing a stone-filled gallbladder prior to its perforation.

CONCLUSION AND SUMMARY

The occurrence of internal biliary fistula among patients with neglected diseases of the biliary tract present a seriously complicated problem for management by the surgeon. These fistulae are not common, but their attending mortality rates can be high. Among the seven patients operated upon at this clinic there were two deaths. This, and the experience of others, would suggest that great care should be exerted toward a better understanding of the etiology, complications, diagnosis and treatment if the results are to be improved. Of importance is the realization that these fistulae occur among the aged population and are frequently associated with an inflammatory process which is active in the sub-hepatic area or ascending into the biliary tract. The presence of infection, hepatic insufficiency, and other secondary complications should serve as a guide in the choice of surgical management. Of greatest importance is the realization by the surgeon that staged remedial procedures can at times salvage the patient to later withstand a definitive correction of the fistula.

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Washington

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pitals to expedite billings. Sixty per cent of the claims for payment reach Washington within three months after completion of service. The remainder take up to two years or even longer. The Medicare headquarters still receives bills that go back to the program's inception in December 1956.

An extension of the regular draft and the special doctor draft became law upon the signing of H.R. 2260 by the President on March 23. This law extends for four years the draft under the Universal Military Training and Service Act. It also extends the special pay provisions of the Career Compensation Act for four years, until July 1, 1963. These provisions were scheduled to expire on July 1, 1959.

Under the special pay provisions of the Career Compensation Act doctors and dentists receive extra pay determined by the number of years of service. These rates are monthly $100 for less than 2 years service, $150 from two to five years, $200 for six through 9 years, and $250 for 10 or more years.

Perinatal Mortality

A Theory Regarding the Possible Influence of Changes in the Cardiovascular and Pulmonary Systems

DANIEL B. LANDAU, M.D., *Hannibal*

EARLY LIFE mortality, especially among those of lower birth weight, continues to be one of the great challenges confronting the physician today. These early deaths, particularly those occurring on the first day, now comprise more than one third of all infant deaths. Bundesen[1] reports that there has been little reduction in the mortality rates the first day of life (natal day) during the last forty years; 11.1 per 1,000 died on the first day in 1912 compared with 9.4 in 1952.

Nesbitt,[2] quoting Vital Statistics Special Reports, states that death rates during the first day which had remained almost stationary since 1915 (15.0-13.9 per 1,000) began to decline in 1940 and in 1953 were 30 per cent lower (9.7 per 1,000 live births).

In Chicago during 1952 the deaths of infants on the first day represented 68.5 per cent of the deaths the first three days and deaths of infants the first three days represented 73 per cent of the deaths the first 28 days. These deaths accounted for 52 per cent, or more than one half of the deaths during the first year.[1]

Satisfactory information on a nationwide basis regarding specific causes of perinatal mortality is scant.[3] Available autopsy information points to various anomalies of the placenta, especially premature separation, as a frequent cause. Various cord conditions also cause a considerable number of deaths in which the cause is specified.

Under 3 days of age abnormal pulmonary ventilation accounts for 50.2 per cent of newborn infant deaths.[1, 4] From three to seven days of age deaths from abnormal pulmonary ventilation drop to 27.2 per cent and from eight to 29 days deaths from this cause drop to 16.3 per cent.

The constancy of the percentage of deaths due to abnormal pulmonary ventilation is shown by Potter[4] who found abnormal pulmonary ventilation as the cause of death in 43.7 per cent of autopsies on 8,905 newborn infants. In another reported series by Potter,[5] 43.8 per cent of 9,741 autopsies[6] showed abnormal pulmonary ventilation as the cause of death.

It is surprising that with the high percentage of deaths from this cause that a relationship between the lung changes and the circulatory changes occurring at birth has not been sought.

Much emphasis has deservedly been placed on the general care of the newborn infant, including his feedings,[7] fluid requirements, and protection against infection.[8] All of these are important and should not be neglected.

Not enough regard has been given to the physiology of the change-over of the lungs and circulatory systems from the fetal to the newborn state. The influences of the cardiovascular changes on the lungs merit much more consideration than they have received; therein may lie a part of the answer to perinatal mortality.

Animal experimental studies have contributed much to present understanding of the fetal and newborn circulations. It is generally known and agreed that comparisons between the human and animals must be accepted with reserve. There are many similarities between the human fetus and newborn and the fetus and newborn of other species; these points of similarity serve us well as a base line, but as a base line only.

Cineradiography using fetal lambs has demonstrated the partial separation of the two caval streams.[7, 9-15] In the sheep fetus the greater portion of the blood from the inferior vena cava crosses the right atrium and enters the left atrium directly by way of the foramen ovale. From the left atrium it goes into the left ventricle and then to the aorta. Blood from the superior vena cava enters the right atrium and is propelled into the right ventricle. It then leaves the right ventricle by way of the pulmonary artery. Some, about 10 per cent, goes to the nonfunctioning lungs but most goes through the ductus arteriosus to the aorta, a right to left shunt.[11, 12, 16] Blood of this mixed stream passes to the lower-most regions of the body and then to the placenta. The main function of this portion of the circulation is to assure the fetus an abundant and continuous circulation through the placenta, where in fetal life the vital processes of respiration, assimilation and excretion take place.[13]

Lind and Wegelius[17] have demonstrated identical pathways in the human fetus.

There are two important changes which affect the cardiovascular and pulmonary systems at birth.[11, 16-22] They are: (1) the increase in systemic resistance due to the collapse and cutting of the umbilical cord, (2) the decrease in pulmonary resistance accompanying lung expansion.

Dawes, Mott, and Widdicombe have shown that in the newborn lamb shortly after birth the direction of blood flow through the ductus arteriosus is reversed. Prior to aeration of the lungs the pressure at the pulmonary end of the ductus arteriosus exceeds that in the aortic end and blood flows from the pulmonary artery to the aorta. When ventilation of the lungs begins there is at once a precipitate fall in both the pulmonary arterial and aortic blood pressures;[20, 21] this is accompanied by a reversal of pressure relationships between the aorta and the pulmonary artery and the blood then flows from the aorta through the ductus arteriosus into the pulmonary artery, resulting in a flow of blood from the systemic to the pulmonary circuit, the opposite to what it is in the fetal state.

Changes in blood pressures coincide with and depend upon an enormous increase in the velocity and volume of blood flow into the lungs as the minute alveolar blood vessels expand and fill with blood.[17, 20] This faster flow into the lungs at a lower pressure obviously means that the resistance to blood flow in the lungs diminishes upon their aeration. This increased volume of pulmonary blood flow raises left atrial pressure considerably and brings about functional closure of the foramen ovale.[7]

These changes in the blood pressures in the pulmonary and systemic circulations immediately following birth lend support to Jäykkä's[23] theory of the mechanism of the initiation of respiration in the newborn infant. He points out that the pulmonary alveolus in the fetal state is collapsed and is surrounded by a dense capillary network which is relaxed in consequence of the small quantity of blood within it. When blood flows into such a system the capillary network expands, thereby causing generalized alveolar expansion. He contends that expansion of the pulmonary alveoli is caused by capillary erection brought about by this increased flow of blood into the pulmonary circulation. Thus, it is his opinion that blood pressure plays a decisive part in the expansile mechanism of the lungs. Up to the present time Jäykkä's theory lacks substantiation.

Carter, Bound, and Smellie,[24] from their studies of venous pressures in newborn infants during the first hours of life, suggest that a raised venous pressure may assist in the expansion of the lungs in newborn infants.

The experience of Dawes, Mott, and Widdicombe[19] to some degree tend to support Jäykkä's theory. From their observations on the newborn lamb they report that the reversal of blood flow through the ductus arteriosus increases lung vascularity to a considerable degree.[21] They emphasize that this increased pulmonary blood flow increases the rate of oxygen uptake and is of considerable physiologic benefit to the animal during the early neonatal period when the lungs are not functioning efficiently.[20] They demonstrated that 11 minutes after ventilation of the lungs had begun that 33 per cent of the total pulmonary blood flow was passing through the ductus arteriosus. They were also able to show that a ductus arteriosus, quite small in diameter, may carry a large amount of blood. In one instance a ductus with an internal diameter of 0.5 mm. carried more than 100 ml. of blood per minute with a pressure gradient of 18 mm. mercury. Their findings indicate that the amount of blood carried by the ductus arteriosus might range from one fourth to two thirds of the total pulmonary blood flow.

Adams and Lind,[25] in their studies on newborn infants, found that 12 per cent of the pulmonary blood flow was going through the ductus arteriosus in a left to right shunt in one infant 9 hours of age. In an infant 7 days of age 17.5 per cent of the pulmonary blood flow was supplied by the ductus arteriosus shunt. They found that hypertension in the right ventricle and in the pulmonary artery exist for three or four days after birth and that reduction to pressures considered to be normal for older children takes place gradually during the first week of life. Their observations indicate that the ductus arteriosus remains functionally patent with predominantly a large left to right shunt for several days.

Rowe and James[26] found adult values of pulmonary arterial pressures in all of the newborn infants more than 11 days of age whom they studied. Under 12 days of age the pulmonary arterial pressures were substantially higher than adult values. Oxygen saturation determinations in this group also confirmed the presence of a patent ductus arteriosus in the majority of the infants. Only one of the six infants studied failed to have a demonstrably patent ductus arteriosus under the age of 12 days.

Thus it seems that the normal pattern in the newborn infant and newborn sheep is for the ductus arteriosus to remain open for a variable period during the change-over so that more blood is delivered to the lungs, thereby increasing lung vascularity and presumably favoring lung expansion. Stating it in another way, the available evidence suggests that developmental emphasis during neonatal life at the time of the change-over is directed toward delivering an optimal amount of blood to the lungs.

Hultgren and his co-workers[27] found evidence to suggest that breathing low oxygen mixtures may reopen the ductus arteriosus in babies less than 3 days of age.

James and Rowe[28] in their studies on the effect of hypoxia during the neonatal period report that if the neonatal circulatory adjustments involving the lungs and the ductus arteriosus have taken place that the response to hypoxia will be the same as in older children and adults. Quoting verbatim: "However, if this adjustment is incomplete a short period of anoxia may produce a dramatic change in the circulatory dynamics so that venous blood may by-pass the lungs at both the foramen ovale and ductus arteriosus levels, producing a precipitous fall in arterial oxygen saturation. Angiocardiographic evidence indicates that this fetal pattern of circulation is present during the respiratory distress syndrome of newborn infants."

Lind and Wegelius[17] report that deterioration of the condition of the newborn infant may lead to a renewal of patency of the ductus arteriosus and foramen ovale.

On considering the cardiovascular and pulmonary changes during the change-over from the fetal to the newborn state is it not reasonable to assume that there is an optimal amount of blood necessary to occupy the pulmonary and systemic circulations in order to facilitate the change-over from the fetal to the newborn state? There must likewise be a minimal or critical blood volume value which if not maintained could ultimately result in shock symptoms with collapse, the identical phenomenon associated with blood loss from severe hemorrhage. Wickster and Christian and Chown[29-31] have described examples of this sequence of events in newborn infants.

The value of the placental blood to the newborn infant has long been a subject of much controversy. Most emphasis has been placed on hemoglobin and red blood cell values. Reynolds[33] has pointed out and stressed that the acute effects as well as the long range adjustments must be considered in judging the value of delayed clamping of the cord. Others have expressed similar opinions.[34-38]

Smith[7] quotes Budin (1876) and Schucking (1877) as showing that about 90 cc. of blood flows from the placenta to the infant during the third stage of labor.

De Marsh et al.[37] quote Engle (1855) as finding the mortality rate twice as great in those premature infants whose cords were tied early as in those whose cords were tied late. They also state that early clamping of the umbilical cord is equivalent to submitting the infant to a hemorrhage at birth.

De Marsh, Windle, and Alt[38] found that immediate clamping of the umbilical cord deprives the infant of an average of 107 cc. of blood. They found that the blood volume of the infants allowed to receive the placental and umbilical vessel blood was 361 cc. or 11.8 per cent of the body weight. The infants whose cords were cut early had an average blood volume of 301 cc. or 9.6 per cent of their body weight. There were also considerable differences in the hematocrit values in the two groups, those whose cords were cut later having the greater values.

McCausland, Holmes and Schuman[39, 40] found that newborn infants receiving their placental blood had higher initial weights, less weight loss and higher hemoglobin and erythrocyte values. It is their feeling that the additional blood supplied is of benefit to those infants who are in any degree of shock following long labors, difficult deliveries, abruptio placenta, placenta previa, and cord compression.

Whipple, Sisson and Lund[41] report that delay in cutting the umbilical cord does not get more blood to the fetus unless the cord is milked.

There is little uniformity in the management of the cord and placenta according to the surveys by McCausland and co-workers[39] and according to Larsson's[42] data. These studies indicate that many infants get little more than the minimal amount of blood from the placenta.

Up to now attempts to lower the perinatal mortality rate have met with little success. What success that has been attained may be attributed to improved general care,[8] better understanding of the newborn infant's physiology,[7] and protection against infection. Since present treatment of the newborn infant in distress leaves a disproportionately high mortality rate, a new point of view is offered.

It is suggested that a great number of these newborn infants showing respiratory distress are suffering from lowered blood volume shock as a result of having been deprived of a considerable amount of their placental blood. This is felt to be similar to that of an older individual who has lost blood as a result of a traumatic amputation or other injury of a comparable nature.

For this reason the term "hematogenic shock" is used rather than anemia. It is my belief that low blood volume shock rather than the accompanying anemia is what kills these infants and that if shock is treated and corrected in time many of them can be saved. The possible relationship between lung expansion and blood volume has been discussed.

In offering this approach to the problem, absolute proof is lacking. The evidence submitted is only suggestive. Since this hypothesis has seemed to serve me well as a working basis it is presented on that basis only.

DISCUSSION

Attention is usually directed to the relationship between the symptomatology of newborn infant distress and lowered blood volume only if the setting is dramatic enough; for example, the pale, obviously bled-out infants described by Wickster and Christian and by Chown.[29-31] Vasa previa, placenta previa, placenta previa Cesarea, abruptio placenta, and occult placental hemorrhage from a fetal circulatory defect are the usual precursors of post hemorrhagic shock of the newborn infant.

If this theory regarding the importance of the influence of blood volume on the changes occurring in the cardiovascular and pulmonary systems is correct, there must be many degrees or gradations of hematogenic shock in the newborn infant just as there are many degrees or gradations in other medical and surgical conditions. In addition to the bled-out infant, representing the extreme degree, milder forms may possibly occur which manifest themselves less spectacularly. The suggestion is made that the symptom-complex usually considered characteristic of hyaline membrane disease, dyspnea, cyanosis, labored respirations with sternal retraction and tachypnea, is basically the hematogenic shock syndrome and that the hyaline membrane is a secondary or incidental finding. The fact that hyaline membrane disease is found most frequently in the infant separated from its placental blood supply the earliest tends to support this idea.[43] However, it must be pointed out that infants of diabetic mothers, in whom hyaline membrane disease has a high incidence, do not fit into this category. Gruenwald[44] has termed the hyaline membrane an "eosinophilic red herring." Others[35] have the same opinion.

From observations on a number of infants deprived of varying amounts of their placental blood it is felt that there are two main divisions of the syndrome of hematogenic shock of the newborn infant with many different gradations in division 2, as follows:

1. The easily recognized bled-out deeply shocked infant.

2. Those in lesser degrees of shock and impaired lung expansion varying from almost total lack of expansion to the milder forms. If this theory regarding the influence of blood volume on lung expansion is correct a blood volume insufficient to bring about the left to right shunt through the ductus arteriosus could lead to failure of closure or reopening of the foramen ovale. Lack of closure or reopening of the the foramen ovale would contribute further to the lack of blood flow through the lungs and lessen lung expansion.

Extreme degrees of this condition are recognizable at birth. These infants have dyspnea, tachypnea and cyanosis. Their respiratory rate increases steadily, they deteriorate rapidly, and they die, presumably from exhaustion.

Lesser degrees of this syndrome are not readily apparent at birth; symptoms appear later, often from one to four hours later. These infants frequently follow the same basic symptom pattern. Preceding the onset of symptoms there is usually a history of early separation of the infant from its placental blood supply. After a comparatively symptom free interval of one to four hours duration, apnea, cyanosis, tachypnea and dyspnea with grunting labored respirations ensue.

Herewith are a number of case reports of infants, whom I have designated as having had the syndrome of hematogenic shock, and the results of treatment. It is my opinion that they represent different degrees of this syndrome. These include my total experiences to date of transfusing newborn infants on whom I have made the diagnosis of hematogenic shock.

CASE REPORTS

Case 1. Baby Girl M. G. was delivered by Dr. Ervan Levine, Vandalia, Missouri. There was placenta previa with loss of a large amount of blood. Bag of waters had ruptured several days prior to delivery but apparently had sealed over as it was necessary for Dr. Levine to rupture it at delivery.

Infant appeared to be at 6 to 6½ months of gestation.

Physical examination showed a ruddy appearing immature premature infant. Weight was 2 pounds, 1 ounce. Respirations were labored and there was considerable sternal retraction. There was lag in onset of respirations, exact time elapse not known. Other than the sternal retraction which was marked, the infant appeared to be in good condition, considering the period of gestation. Breath sounds were audible in all areas. Heart tones were good. Examination was limited because of the immaturity of the infant.

Because of the history of considerable blood loss and because of the sternal retraction it was felt that a blood transfusion was indicated.

Blood transfusion was started one hour and 35 minutes following delivery and completed in 15 minutes with 15 cc. of blood given through the umbilical vein.

The infant appeared improved at 10:00 a.m. the following morning. There was less retraction but respirations were still rapid and deep. During the afternoon the respiratory rate increased steadily, the infant's condition deteriorated and the infant expired at the age of 26 hours and 10 minutes.

Autopsy by Dr. H. H. Sweets, Jr., chairman of the Department of Pathology, showed (1) premature infant; (2) faulty lung expansion. Lungs not expanded, crepitant in but a few areas, (3) ductus arteriosus open.

Lungs.—The sections show areas in which some of the alveoli are expanded and these are lined with epithelium which is moderately flattened. Many other sections show the alveoli unexpanded and and lined with cuboidal epithelium. There are areas which have small concentrations of erythroblasts. The bronchi are not remarkable. In some of the areas where the alveoli are expanded some of the alveoli contain finely granular precipitated material. The bronchi contain small collections of this material both in the sections with the alveoli expanded and in those with the alveoli not expanded.

Interpretation.—Classified as a premature infant delivered early because of placenta previa. Diganosis of hematogenic shock. Treated by blood transfusion. Questionable temporary improvement followed by rapid deterioration of the infant's condition and death.

Case 2. Baby Boy A. C. K. was delivered by section at 12:18 a.m. by Dr. F. R. Burns and Dr. R. M. Strong.

Indication for section was placenta previa with profuse blood loss and profund shock and 1,500 cc. of blood were given under pressure before section could be started because of severe shock. Another 1,000 cc. were given during surgery.

Infant weighed 3 pounds, 6 ounces; pale and flaccid appearing. Two or three gasps ensued about two minutes following birth. Resuscitator was started at three minutes with regular respirations at eight minutes.

Infant appeared to be deeply shocked. Pallor, tachypnea and deep respirations with retraction were evident. Unable to obtain sufficient blood from cord for studies. Heel puncture yielded enough for red cell count. It was apparent that the circulation was not good. It was my opinion that this infant was in severe hematogenic shock and that he should have a blood transfusion. Red blood cell count was 3,200,000.

Blood transfusion was started at 12:53 a.m. by means of umbilical vein cannula with plastic catheter. Blood was given slowly, 5 cc. at a time. When 23 cc. of blood had been given the infant's respirations changed and there was a cry which was similar to the cry and grunting sounds that babies receiving exchange transfusions utter when venous pressure is elevated. Unfortunately the venous pressure was not measured. Three cc. of blood was withdrawn, the transfusion was stopped and the child was taken to the nursery and placed into Isolette.

Infant's color was considerably improved. He was more lively, respirations were regular; but there was still a moderate amount of sternal retraction and a moaning cry.

The following morning his color was only fair; he was quiet and not moving. On thumping heels he grimaced as though in pain but did not cry. There was moderate sternal retraction but less than previous night. Rales were audible in the left lower lobe anteriorly and laterally. Prognosis was guarded. Red cell count was 4,020,000 Hgb. 12 gm.

Infant remained listless and became cyanotic at 6:00 p.m. and cyanosis deepened. The infant expired at 10:40 p.m.

Autopsy by Dr. H. H. Sweets, Jr., M.D. showed pallor; prematurity; fetal atelectasis, bilateral, posterior two thirds; foramen ovale, functionally closed; ductus arteriosus open; liver, kidneys, spleen, adrenal glands not remarkable.

Lungs.—There are many areas in which there are no expanded alveoli; the alveoli are lined with cuboidal cells. Some sections show some of the alveoli to be expanded. A few of these show portions of structureless bluish staining material in the lumen near the epithelium, and some show alveoli filled with finely granular precipitated material. Lung showed atelectasis, fetal, occasional hyaline material in alveoli, some pulmonary edema.

Interpretation.—It is felt that in this infant the shock state from blood loss had progressed beyond the point of reversibility prior to section.

Case 3. Baby Girl D. W. was delivered at 10:57 a.m. by emergency section because of severe hemorrhage. Patient was brought a distance of 50 miles. The bleeding was so severe that the surgeons had insufficient time to scrub properly. Surgery by Dr. W. F. Francka and Dr. R. M. Strong.

One third of the placenta had separated and a large infarct was present at the periphery.

Infant weighed 3 pounds, 12 ounces, was pale and flaccid; had little spontaneous movement. Heart tones were fair. Femoral pulsations were palpable but weak. Umbilical cord was short. Gastric suction yielded 1 cc. Umbilical cord collapsed in five minutes. Four cc. of blood were recovered from the severed end of the umbilical cord.

Infant's condition was poor. Chest retractions appeared as though the lower portion of the sternum almost touched the vertebral column; no cyanosis, marked pallor.

Impression was (1) hematogenic shock, (2) anoxia, (3) anemia. At birth, Hgb. was 11.6 gm. and red cells 3,500,000.

Because of the clinical picture of shock and anemia a blood transfusion was felt to be necessary.

Blood transfusion was started at 12:06 p.m. and finished at 12:20 with 26 cc. given. Venous pressures were not determined. Umbilical vein was the site of the transfusion.

At the end of the transfusion the color was improved. Chest retractions were still present, struggling less marked, and heart tones were good. At 4:00 p.m. Hgb. was 10.7 gm. and red cell count was 3,680,000.

Next morning the infant's condition was still precarious. Sternal retraction was much less and color was good. Cry was strong on stimulation and sometimes without stimulation. Heart tones were distant, rhythm regular; clicks scattered in both lungs; edema of hands and feet.

Impression was that the child improved but the prognosis still guarded.

Progress was slow but after the first few days was fairly steady.

Infant was dismissed at 46 days of age with Hgb. 8.3 gm., red cell count 3,220,000 and weight 5 pounds, 5½ ounces.

Subsequent course showed considerable developmental retardation in the motor and adaptive spheres. At 14 months of age development was less than that of a child of 6 months. He was enrolled in a cerebral palsy clinic.

Interpretation is that this represents an extreme degree of hematogenic shock with anoxia, abnormal pulmonary ventilation and cerebral damage as a result of anoxia. Abnormal pulmonary ventilation was treated successfully by means of transfusion but the cerebral anoxia was of too long duration to be helped.

Case 4. Baby Girl T. T. was delivered by section at 6:11 p.m. by Dr. R. J. Lanning assisted by Dr. M. J. Roller because of profuse bleeding from placenta previa; 34 weeks gestation. Weight of infant was 4 pounds, 11 ounces.

Infant took several breaths immediately following delivery and cried twice. Moderate amount of fluid was aspirated from the pharynx. Placenta was suspended so that blood could flow from the placenta to the infant. Resuscitator was started at 6:15 p.m. Three cc. of fluid were aspirated from the stomach. Caffeine sodium benzoate, 30 mg. intramuscularly was given at 6:30 p.m. There were occasional gasps but regular respirations were not established until 6:27 p.m. Infant was taken to the nursery. There was considerable sternal retraction with each labored respiratory effort. Infant was cyanotic.

Because of the dyspnea, tachypnea, cyanosis, and especially because of the history of considerable blood loss, it was felt that the infant had the hematogenic shock syndrome and that a blood transfusion was advisable.

Transfusion was started at 8:25 p.m. Venous pressure at onset was 0. Thirty-two cc. blood were given via umbilical vein. Venous pressure at the conclusion of the transfusion was 2 cm. Procedure was finished at 8:34 p.m. Infant when taken to the nursery looked about as she did prior to the transfusion. Sternal retraction was still quite pronounced. Respiratory rate varied between 60 and 68.

The next day, the first day following birth, the infant still showed sternal retraction and inspiratory effort. Infant's color was good although there was some cyanosis of the hands and feet. Examination of the chest showed little evidence of breath sounds on either side and there were a few crackles in the left upper lobe posteriorly.

Impression was abnormal pulmonary ventilation with prognosis guarded.

Second day following birth the condition was slightly improved. There was considerable retraction but retractions were not as deep as formerly. There was no cyanosis; slight twitching of the arms and twitching of the legs reported during night.

Dr. Lanning aspirated a large amount of mucus from the pharynx the previous night when the infant had a severe cyanotic spell. Symptoms were relieved at once. This was the only time that aspiration of the pharynx was necessary. It was the only actual cyanotic spell that the child had.

Impression was that the infant was slightly improved. Hgb. was 20.8 gm., red cell count was 5,920,000.

Chest plate taken second day after birth showed a diffuse alveolar atelectasis, scattered throughout all lung fields.

Chest plate 24 hours later showed considerable resolution of these areas. Infant's progress from fourth day on was favorable and steady. Infant was dismissed at 58 days of age; delay in discharge due to home conditions.

Follow-up observations were irregular. Dr. R. J. Lanning states that development had been normal early; no recent visits to him.

Interpretation was abnormal pulmonary ventilation in a section infant with considerable loss of blood from placenta previa leading to hematogenic shock. X-ray findings were somewhat suggestive of hyaline membrane disease. This infant's course may be thought of as an example of an infant with hyaline membrane disease whose chances of survival were increased by having an adequate blood volume.

Case 5. Baby Girl B. K. R., a 4 pound, 11 ounce female infant, was delivered by Dr. Francis R. Burns at 36 weeks gestation, following a long hard labor characterized by lack of uterine relaxation between contractions. Membranes ruptured 2 hours and 50 minutes prior to delivery. Large amounts of blood stained fluid were passed following rupture of membranes. Contractions became much harder with less relaxation between them. By that time it was obvious that the patient had a placental abruption although there had been no signs of shock and no evidence of possible toxic basis for abruption.

Infant was born at 12:35 p.m. Immediately after the head was delivered a large amount of blood spurted from the vagina as if under pressure; and following delivery of the body considerably more blood and clots were passed.

Quoting directly from Dr. Burns' note: "Inspection of the cord and placenta revealed a rather small placenta with a battledore type of insertion of the cord. The area of separation of the placenta involved approximately ⅓ of the maternal surface and was situated adjacent to the margin to which the cord was attached. This seemed to indicate that the mechanism of separation in this case was a mechanical one in which the placenta became partly detached due to traction of fetal movements on an abnormally short cord, causing separation of the margin to which the cord was attached. The cord itself measured 13 inches in length and was partially thrombosed at the time of delivery."

The baby, shortly after delivery, was crying, but was considerably depressed. It was noted that there was little spontaneous movement. Infant was placed in an incubator as soon as mucus was aspirated and as soon as satisfactory respirations were established. Coramine .2 cc. was administered.

The infant's color when placed into incubator was fairly good. Respirations were regular and there was no dyspnea, cyanosis or evidence of respiratory struggle. The infant was normally active when report was received from the nurse in charge at 2:50 p.m.

At 3:30 p.m. when blood was being taken from heel puncture infant was lethargic, had a pallid cyanosis and respirations were rapid and shallow. Chest was normal except for shallow respirations. Heart tones were not good. Femoral pulsations were weak. It was felt that the infant had hematogenic shock. Infant was taken to surgery immediately for transfusion.

Two attempts to get into the left antecubital veins and dorsal hand veins were unsuccessful. When the tourniquet was removed from the forearm the forearm and hand remained pale for much longer than the usual time. The infant did not resist these attempts at venipuncture. Anterior frontal scalp vein was entered and 40 cc. of citrated blood were given. After 15 cc. were given there was an abrupt and distinct change in the infant's appearance. The color changed to a healthy pink and remained so. Respirations were regular, deeper, and less rapid. Heart tones were good at the conclusion of the transfusion and the infant was returned to the nursery considerably improved. There was a steady improvement throughout the night. The following day the infant was normally active for one of its size.

Weight dropped to 4 pounds, 4½ ounces at 8 days of age. Thereafter she gained steadily and was discharged to her home at 25 days of age, weighing 5 pounds, 2¼ ounces, in excellent condition.

While child was being seen regularly during her first year, it was evident that her developmental progress was slower than normal, even allowing for prematurity. Athetoid movements of the upper extremities were noticeable and were persistent.

Direct copy of office record of visit of August 8, 1955, at 15 months of age: "Cruising about her crib and other objects for three weeks; appears to be on the verge of standing alone. Am unable to understand her talking. Has been bowel trained for two weeks."

Developmental progress has been more rapid recently but it is reasonably certain there was damage from the anoxic hematogenic shock episode three hours following birth.

Seen May 13, 1958, she was normally active and talking well and has a good vocabulary. There was no athetosis. There was satisfactory progress with considerable improvement.

Interpretation was that this can be classified as hematogenic shock with cerebral damage from anoxia as a result of abnormal pulmonary ventilation. Abnormal pulmonary ventilation was treated successfully by blood transfusion. There was residual brain damage with considerable recent improvement.

Case 6. Baby Girl H. R. R. was delivered by section at 8:48 a.m., Dr. W. F. Francka assisted by Dr. J. M. Canella. Indication for section was previous section.

Infant was delivered through midline uterine incision. The placenta was directly under the area of the incision and there was considerable bleeding from the placenta prior to the delivery of the infant. The infant took several breaths while still at the operating table while placenta was being separated but did not cry. Placenta was suspended so that blood would flow into the infant. One cc. fluid was aspirated from the stomach by gastric suction. Little fluid was obtained from the pharynx. Infant made no respiratory efforts. Resuscitator was started at 8:51 a.m. Color remained good. Regular respiratory rhythm was established at 9:04 a.m. Child did not cry during this time. She was taken to the nursery breathing regularly; condition apparently improved. There was tachypnea but respirations were not counted. Weight was 4 pounds, 7¾ ounces.

At 9:20 a.m. there was a long period of apnea; child quite pale. Resuscitator was started and 0.4 cc. caffeine sodium benzoate was given. The child began to breathe again and the pallid color of the skin gave way to irregular areas of pink and soon a good color was restored.

Because of the difficulty at the time of delivery at which time there was considerable blood loss from the placenta lying directly beneath the uterine incision (placenta previa Cesarea of De Lee) and because of the sudden onset of apnea with pallor it was felt that this infant was suffering from hematogenic shock. Blood transfusion was considered advisable.

At 10:00 a.m. Hgb. was 17.4 gm., and red cell count was 6,200,000.

While preparations for the transfusion were being made the infant had a severe cyanotic spell. There were no respiratory grunts or other signs of distress except for the tachypnea which had been present since birth.

Blood transfusion was started at 10:32 a.m. via umbilical vein using umbilical vein cannula and plastic catheter. Procedure was finished at 10:48 a.m. Child remained in Isolette while blood was given. Oxygen was administered continuously. Venous pressure at the beginning of the transfusion was 0. Venous pressure at the end of the transfusion was 3 cm. and 22 cc. of blood were given.

One hour following the transfusion there was considerable improvement in the general appearance. The hands and feet were still somewhat cyanotic. Lips were pink, skin pink. Tachypnea was still present. At 2:00 p.m. Hgb. was 18.7 gm., red cell count, 6,500,000.

At 5:45 p.m. on the date of delivery the condition appeared good. On administration of penicillin the infant's cry was prompt and vigorous; moved extremities well. There was much less cyanosis of the feet and hands. Respiratory rate continued high, having been counted between 90 and 100 on several occasions. There was not much sternal retraction.

Improvement continued. She was dimissed with mother at 10 days of age.

Child has been seen regularly since. Developmental progress has been excellent.

Interpretation was that this is classified as placenta previa Cesarea, hematogenic shock, and abnormal pulmonary ventilation which were successfully treated by blood transfusion.

Case 7. Baby Boy K. M., one of twins, weight 5 pounds, 5½ ounces, was delivered by Cesarean section at 11:55 a.m. by Dr. W. F. Francka and Dr. C. A. Lichty. Indication for section was premature separation of placenta. Considerable blood was lost. On opening the uterus there was a considerable amount of blood mixed with the amniotic fluid. Infants were delivered at 11:55 a.m. and placentae were fused. Large amounts of bloody fluid were aspirated from the pharynx of each and 11 cc. aspirated from girl's stomach, 3 cc. from K's stomach. Girl did well and continued to do so.

K. M. had regular respiratory rhythm sooner than his sister but he was pale.

Cord collapsed 14 minutes following delivery. Twelve cc. of blood were recovered from the severed ends of the umbilical cords. K. M. was pale and was placed into Isolette. Hgb. was 15.2 gm. and red cell count 4,330,000.

K. M. had a mild cyanotic spell at 1:00 p.m. when blood was taken from heel. There was a severe cyanotic spell at 1:15 p.m. and the child was limp and listless. Because of the history of premature separation of the placenta, with blood loss, pallor and cyanotic spell, it was felt that this infant had the early findings suggestive of hematogenic shock and that a blood transfusion was indicated.

Transfusion was started at 2:04 p.m. Polyethylene tubing was inserted into the umbilical vein. Venous pressure was 4 cm. at the beginning of the transfusion and 7 cm. at the end of the transfusion. Fifty cc. of blood were given with probable loss of 3 cc. during measurements of venous pressures and other manipulations. Procedure was finished in 11 minutes.

Infant was returned to nursery somewhat improved. Respirations were still rapid. Color was good but not as good as that of his twin sister.

On the following morning respirations were practically normal. Excursions were equal. Infant cried heartily. Infant was active; quite icteric.[33-35] Indirect bilirubin was 23 mg. per cent and Hgb. 17.5 gm., red count 5,000,000.

Child received two exchange transfusions because of pronounced jaundice and failure of the indirect bilirubin to remain under 20 mg. per cent after the first exchange transfusion. Antibodies were demonstrated by Dr. Henry H. Sweets, Jr., M.D., pathologist. These were not of the Rh or ABO types.

Interpretation was that this infant's course is classified as hematogenic shock with early signs of abnormal pulmonary ventilation following section because of premature separation of the placenta. It is felt that transfusion was effective therapy for this infant. Because of the presence of antibodies demonstrated by Dr. Sweets it is likely that this is not the same type of icterus of infants who have respiratory distress described by Miller.[46] (Gantrisin and large doses of Vitamin K had not been given.)

Case 8. Baby Boy D. T. H. weighed 4 pounds, 7 ounces, the second of twin boys delivered by Cesarean section by Dr. W. F. Francka assisted by Dr. B. L. Murphy at 1:05 p.m. Indication for section was abruptio placenta with a moderate amount of blood loss for several hours. Average amount of mucus was aspirated from the pharnyx. Spontaneous gasp shortly followed removal from the uterus. Gastric suction yielded no fluid. Heart action was strong throughout. Resuscitator was used with good effect and infant breathed well.

The placentae were fused. There was about one fourth area of separation. Cord was collapsed at 1:13 p.m. About 40 cc. of blood were collected from the two severed cords. Some of the blood ran down the outside of the cords from the fused placentae. No abnormalities were noted and the infant was placed in an incubator. Oxygen 4 L/m was started.

Condition remained good until about 4:30 p.m. at which which time the infant had a cyanotic spell which was relieved by oxygen by funnel. Grunting labored respirations ensued and continued. Color was good while the oxygen was being administered. Heart tones were fairly good. There were no rales and breath sounds were audible throughout. Pulse rate varied from 140 to 160. It was felt that the patient's condition was due to hematogenic shock. Transfusion was indicated on basis of diagnosis of shock.

Infant	*Gestation-Weeks*	*A. Type Delivery B. Complication*	*Weight*	*Age at Onset of Symptoms*	*Presenting Symptoms*	*Venous Pressures (cm.)*	*Hgb. and R.B.C.*	*Treatment (Blood Transfusion)*	*Results*
1. M. G.	27	A. Vaginal B. Placenta previa	2 lb. 1 oz.	At birth	Labored respirations, sternal retraction	0 at start, 5 at conclusion of procedure	Not determined	15 cc.	Expired, faulty lung expansion. Alveoli; granular material
2. A. C. K.	30	A. Section B. Placenta previa	3 lb. 6 oz.	At birth	Shock, pallor, tachypnea, deep respirations	Not determined	3,200,000	20 cc.	Expired, fetal atelectasis. Alveoli; finely granular material
3. D. W.	31	A. Section B. Premature separation of placenta	3 lb. 12 oz.	At birth	Shock, pallor, flaccidity, marked chest retraction	Not determined	11.6 gm. 3,500 M	26 cc.	Survived. Cerebral palsy. Mental retardation
4. T. T.	34	A. Section B. Placenta previa	4 lb. 1 oz.	At birth	Rapid respirations, sternal retraction, cyanosis	0 at start, 2 at end	Not determined	32 cc.	Normal development
5. B. K. R.	36	A. Vaginal B. Abruptio placenta	4 lb. 11 oz.	2 hours 30 minutes	Pallid cyanosis, rapid shallow respirations, weak peripheral pulse	Not determined	Not determined	40 cc.	Survived. Residual athetosis, delayed speech, recent acceleration of development
6. H. R. R.	40 estimated, probably 37	A. Section B. Placenta Previa Cesarea	4 lb. 7¾ oz.	32 minutes	Apnea, pallor, tachypnea	0 at onset, 3 at end	17.4 gm. 6,200,000	22 cc.	Survived. Normal development
7. K. M.	37	A. Section B. Premature separation of placenta	5 lb. 5½ oz.	1 hour 5 minutes	Flaccidity, cyanosis, listlessness	4 cm. at onset, 7 cm. at the end	15.2 gm. 4,330,000	50 cc.	Survived. Hyperbilirubinemia. 2 exch. transf. Normal deopment
8. D. H.	35	A. Section B. Abruptio placenta	4 lb. 7 oz	3 hours 35 minutes	Cyanosis, grunting labored respiration, pulse 140-160	Not determined	Not determined	25 cc.	Survived. Normal development
9. A. R. K.	40	A. Section	6 lbs. 12 oz.	At birth	Pallor	0 at start, 2 cm. when completed	14.6 gm. 4,300,000	45 cc.	Normal progress

Transfusion of whole blood was given by scalp vein slowly; the blood pumped in. The area about the site of the transfusion turned a deep red during the time the blood was being pumped in and faded slowly while the 5 cc. syringe was being refilled. This area was 6 to 7 cm. across with interspersed pale areas and was roughly triangular in shape. Twenty-five cc. of blood and 5 cc. isotonic saline solution were given. After 3 or 4 cc. were pumped in a bubble was found in the system and the adapter was disconnected from the three way stopcock. Blood came from the open end in a steady stream. After the system was cleared of the bubble, which took but a few seconds, the transfusion was resumed and finished without difficulty. The infant was returned to the nursery in improved condition. Respirations were even, regular and not labored. Color was good. The course from then on was uneventful with discharge on the fourteenth day with brother and mother.

Interpretation was that this is classified as an example of hematogenic shock in a newly born Cesarean section premature infant with early signs of abnormal pulmonary ventilation, successfully treated by blood transfusion.

His development has been excellent.

Case 9. Baby Boy K. was delivered by Cesarean section at 7:48 a.m. by Dr. E. L. Levine and Dr. R. J. Lanning. Indication for section was previous section. Weight of infant was 6 pounds, 12 ounces.

On transporting the infant and placenta from the operating table the placenta slipped out of the towel, fell to the floor, and the cord broke. Blood loss was thought to be considerable but the amount is not known.

When seen in the nursery the infant was pale and appeared to be anemic, much less ruddy than most newborn infants. Hemoglobin was 14.6 gm.; red blood count 4,300,000.

Quoting directly from note on the chart: "RBC less than 5,000,000 with a hemoglobin less than 18 grams immediately following birth, with a history of blood loss suggests diminished blood volume with loss of RBC and Hgb."

Examination except for the pallor was normal. There was no respiratory distress, cyanosis or tachypnea. It was felt that a transfusion was indicated, however, because of the history of the blood loss, appearance of the baby, and the values of Hgb. and red cell count.

Forty-five cc. of blood were given by umbilical vein; transfusion started at 10:10 a.m. and ended at 10:19 a.m. Venous pressure at onset was 0. Venous pressure was checked several times during the procedure and varied from 2 to 4 cm. The final venous pressure reading as the transfusion was finished was 4 cm. Infant was returned to nursery in good condition. Forty-eight hours later the Hgb. was 18.6 gm., red count 6,110,000.

Subsequent course was that of a normal newborn infant and the child was discharged with mother on the tenth day of age.

Developmental progress has been normal.

Interpretation: classified as potential hematogenic shock from loss due to accident involving placenta and cord. Prophylactic treatment was blood transfusion, given before adverse symptoms could develop.

CONCLUSIONS

1. An important relationship between the transitions occurring in the cardiovascular and pulmonary systems during the change-over from the fetal to the newborn state is suggested.

2. It is postulated that this might be an etiologic factor in certain instances of perinatal mortality due to abnormal pulmonary ventilation.

3. Case reports showing the various phases of what I have chosen to designate as the hematogenic shock syndrome and the method of treatment are presented. These vary from the severe forms, in which the infant is in irreversible shock, through the less severe forms, where the outcome is in doubt for some time, to the milder forms.

4. The birth history and the history of the onset of symptoms are useful guides for deciding whether or not a transfusion is indicated.

5. Capillary hemoglobin determinations and red blood cell counts are often of no help in deciding upon transfusion as treatment.

6. There is no evidence that the transfusions were harmful to any of the infants treated.

7. Early blood transfusions of some of the infants studied and treated were apparently effective.

8. The sequence of events preceding the onset of symptoms and the symptoms are similar to many of those infants in whom the hyaline membrane is found.

9. Since thus far no treatment for abnormal pulmonary ventilation of the newborn infant has had consistent success, it is suggested that this hypothesis be considered.

10. It is urged that investigations be made to test the validity of this hypothesis.

11. As a means of testing the validity of this hypothesis it is suggested that blood transfusions be given in those instances in which history and findings suggest that the newborn infant has lost blood. This is proposed as prophylaxis and treatment of abnormal pulmonary ventilation in the newborn infant, especially in those infants who have been deprived of their placental blood.

12. Eliminating Case 9 (A. R. K. who had not developed alarming symptoms prior to transfusion), six of the eight infants treated survived.

B & L Bldg.

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A Simple and Effective Treatment for Otitis

CLAIR STARRETT LINTON, M.D., *Kennett*

No ONE SHOULD ATTEMPT to treat an ear who cannot clearly visualize the ear and understand what he sees. This is an old axiom in otology, which has been frequently disregarded in recent years as a result of the effectiveness of antibiotics. The general practitioner and the pediatrician have thoroughly invaded the field of otology with a considerable degree of effectiveness. It is not uncommon, however, in the office of the specialist to see patients who have been treated for "sore ears" or blockage of hearing by many injections of antibiotics over a period of weeks, when the trouble is due entirely to accumulated debris or a bit of impacted cerumen against the ear drum.

The first essential in any treatment, therefore, is to be able to see, and to know whether the objects seen, are tissue or foreign matter, and if tissue, whether it is normal or abnormal. Failure to meet this requirement demands that the patient be referred immediately. The next essential in treatment is that if debris is present, the doctor must be able to clean and dry the ear thoroughly. Failure to do this will only lead to difficulties and loss of confidence by the patient. Nowhere in medicine is the old saying "cleanliness is next to godliness" more true than in the ear.

Since the general practitioner is treating most cases of otitis it is desirable that he do so effectively. It is too common an experience to find cases of chronic running ears as a result of inadequate early treatment. This is due to negligence on the part of the patient in some cases, and to

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inadequate or improper use of antibiotics in others. It is necessary that the doctor be willing and able to disqualify himself in cases in which he is not competent. It is my purpose to describe an effective topical treatment for all kinds of otitis in which the infection is superficial and can be reached by such treatment. The relationship with deeper seated infections will be considered. Classification, symptoms and diagnosis will be taken up only from a practical clinical standpoint.

CLASSIFICATION AND DIAGNOSIS OF OTITIS

Infection in the ear is classified according to location, as external otitis, involving only the external canal, and otitis media, involving only the middle ear. Infections of the inner ear or deeper structures will not be considered here. Differentiating between these two conditions is not always easy. When the canal is swollen as a result of a middle ear discharge, or an external otitis, it may be difficult or impossible to see the ear drum. A definite knowledge of the source of the discharge may hang in the balance until swelling in the canal is reduced and, by that time, the ear may be dry. Everyone is happy as long as the treatment is effective and recovery rapid. The ear drum may be difficult to see in other cases, because of a narrow or crooked canal. The best way to detect an external otitis is to elicit tenderness by traction on the auricle.

External otitis may be further classified as superficial or deep infection. The most important criterion here is temperature. There will be no fever when the involvement is superficial, although tenderness in the canal may be marked and considerable discharge or exudate present. Severe pain and swelling are also suggestive of a deep seated infection which will require more than superficial treatment. If the patient has not slept for a night or two it is useless to expect a cure from local applications alone.

There are two other complicating factors in diagnosis which should be mentioned. Patients will at times complain of a severe pain in the ear which would suggest the presence of significant infection. Examination, however, shows essentially normal structures indicating that the condition is a neuritis. Many of these will have neuritis pains elsewhere in the body. Others may have a tempeomandibular joint syndrome as a result of erosion of tissues in the joint from malocclusion. These latter cases may have considerable tenderness in the anterior canal wall and even some inflammation.

Another common ear symptom which is not serious, but annoying to the patient, is itching of the canal. The cause of this condition, which is practically devoid of local findings, has been ascribed to many things. Different factors undoubtedly enter into individual cases. There may be secondary infection or the picture may be complicated by allergies or focal infections. Patients are sometimes relieved by taking them off a certain food or removing an infected tooth. More recent information suggests that the real basis for the trouble is generally unrecognized. Many of them are relieved by improvement in the general health and nutrition. Treatment must be adapted to the case.

Much has been written about classifying external otitis into allergic or infectious and then subdividing the infectious into bacterial of various kinds and fungal. The present treatment seems to be equally effective against all these, thus simplifying laboratory and diagnostic procedures. This should be a great help to the practitioner who has neither the time nor the facilities for such procedures. Furthermore, the delay caused before proper treatment is instituted is often of crucial importance. The infection may reach deeper in the tissues, pain become severe, and the condition become more difficult to treat, with recovery prolonged.

TREATMENT

The first essential in treating any ear is to have it clean. It is cleaned thoroughly, not once but every time it is treated, and treatments must be close enough together to keep all the gains that have resulted from previous treatment. This frequently means that it must be treated daily for two or three times. The amount of discharge, pain, swelling and fever are pretty good indications as to the intensity of the treatment required. It is more than useless to give a penicillin injection once or twice a week for an otitis media when one treatment does not clear it up. Too often there is enough improvement to make the patient think it is going to clear up, and then it does not. This is one way in which chronic ear conditions originate. I have used little penicillin recently due to the high incidence of allergic reactions and its decreasing effectiveness. If one or two injections are not effective the drug should be discontinued. Many patients have been seen who had four to eight injections of penicillin and the ear was still about the same as when treatment started. It should never be used in chronic running ears.

After the ear is cleaned, using peroxide on a swab if necessary to remove adherent material, the local treatment may be applied. It is the same whether the diagnosis is otitis externa or otitis media, and, if it is an external infection, it matters not whether it is due to a mycosis or to some kind of bacteria. The results are excellent in all of these conditions. A 10 per cent aqueous mercurochrome is applied first, covering the entire canal wall and membrani tympani. This is best done through an ear speculum using a cotton swab on a metal ear applicator. The swab should have a loose tip of cotton for contact with the ear drum and be sufficiently small to allow free passage through the ear canal. It should be well saturated with the solution in order to cover the entire surface adequately. The ear speculum will prevent unnecessary contact with the auricle.

Patients have not objected to the red color even when used on lesions extending to the auricle. There is no pain like that with alcoholic solutions. Only occasionally does it set off burning and an exacerbation of pain in an acutely inflammed ear drum. It is difficult to tell whether it is the trauma of application or the solution itself which causes the pain. When a sizable perforation exists and the drum is not too acutely inflammed, the saturated swab should be held over the perforation and pumped back and forth a few times to get as much of the solution as possible into the middle ear. This can be done without any particular discomfort to the patient, especially in cases of chronic discharge. An alternative method, which is better in many patients, is to place two or three drops in the canal with the head held in a horizontal position, so the solution will stand on the ear drum. This should not be done in acute cases, but when acute inflammation has subsided, a displacement technic may be used by placing the finger on the tragus and pressing downward in such a way as to close the canal and produce pressure. Alternate pressure and release in this manner will displace the solution into the middle ear providing it is standing over the perforation.

There is no pain from the procedure and no harm should result when judiciously applied. The solution may come through the eustachian tube into the throat in some cases, leaving a bad taste in the mouth. It can go equally well into adjacent mastoid cells which are not blocked. Mercurochrome is not as bacteriocidal as some drugs, but it is certainly bacteriostatic in the concentration used, it penetrates well, does not damage the tissues and its presence where desired is easily detected. Its usefulnes is general in cases of otitis, regardless of the cause, the location, or whether it is acute or chronic. The method of application is the only variable factor.

Following the application of mercurochrome, the ear is allowed to dry slightly, and any pools of fluid in the depth of the canal eliminated. The ear is then thoroughly sprayed with powder from a powder blower. If the canal is slightly wet the powder will cover it with an even film, and if there is no pool of fluid, it will not cake in the canal. The powder blower must be functioning so the dosage of powder can be properly regulated. Should the canal be filled at any point, discharge may cause it to cake and be difficult to get out. More powder can be used in the presence of a heavy discharge, which will tend to wash it out. The powder commonly used was sulfathiazole a few years ago, and more recently, sulfadiazine. No difference in results could be noted. Other powders may prove just as effective.

It is believed that the effectiveness of the powder, in many cases, is due as much to its physical properties as a dry powder as it is to any chemical properties. This may account for an almost equal effectiveness in all types of infection of the external canal whether it is a mycosis, a pseudomonas, a staphylococcus or other unknown type. All types of microscopic life require adequate moisture to survive. A powder that is soluble in water and can penetrate the tissues to some extent will also produce a bacteriocidal or bacteriostatic film when applied to a slightly moist surface. If sufficient powder remains to keep the surface dry, and the infection is not too deep, it may be wiped out at one application. This has happened rather frequently.

Treatment is not complete in most cases when local applications are made to the ear. The presence of considerable pain and swelling, or fever in cases of external otitis, are almost certain indications that local treatment will not be adequate. The infection is too deep to reach locally and, therefore, antibiotics must be given by mouth or injection. Reliance has been placed in dihydrostreptomycin intramuscular, 1 gm. for adults, and 0.5 gm. for children 6 years or over. It seems to be more effective in chronic cases, and more certain than penicillin in acute cases. Achromycin V, chloromycetin, panmycin, tao, albamycin and more recently ilosone have been used orally with good results. Ilosone is favored at this time because of its wide spectrum and quick penetrating properties. The usual dosage is 250 mg. every six hours, but this should be doubled for the first one to three doses in adults or older children, when the infection is severe.

An important instruction to patients using this type of treatment is to keep water and all kinds of solution or drops out of the ear. These will dislodge the powdery film and spoil its effectiveness. Only dry cleaning should be used. Pain can be treated by dry heat, analgesics and hypnotics, reinforced with thorazine if necessary. When discharge is abundant, daily cleaning and treatment is indicated. Two or three such treatments are all that is necessary in practically all except a few of the more chronic cases. A final cleaning of the ear is usually desirable even though it is dry and causing no trouble. Remaining debris or powder may predispose to further trouble in the future.

Otitis media cases are not completed with the return of a dry ear, healing of the perforation and restoration of hearing. The cause in children is usually found in the tonsils and adenoids. Repeated attacks should certainly point to the desirability of removing the cause. The nasal passages in adults should be examined for deviated septum or sinus trouble.

The results of the treatment, the number of days required to secure remission of symptoms,

TABLE 1
RESULTS

RESULTS	*Otitis Media* ACUTE	*Otitis Media* CHRONIC	*External Otitis* LOCAL RX	*External Otitis* LOCAL & SYSTEMIC
Well	16	30	18	10
Much improved	3	5	9	4
*One treatment only	10	6	45	21
Not improved	0	1	2	2
No. Treatment for Recovery of Well or Greatly Improved				
TREATMENT NO.	CASES			
1	4	11	6	
2	9	17	17	8
3	4	1	4	4
4	1	4		2
5	1	1		
7		1		
Days to Recover for Well and Greatly Improved				
NO. DAYS	CASES			
1			5	2
2	7	8	2	3
3	4	7	12	3
4	6	11	6	
5	2	1	1	1
7		3		3
9		3		
11			1	2
16		1		

Total patients:	Acute otitis media	25
	Chronic otitis media	24
	External otitis	83
External otitis:	Local treatment	67 infections
	Local and systemic	40 infections

* Not seen again

and the number of treatments given are outlined in table 1. The only grouping of cases attempted here is a division of otitis media into acute or chronic, and the external otitis cases into those receiving only local treatment or those receiving local and systemic treatment. Canal infections receiving systemic therapy were usually severe.

The patients who received one treatment only and did not return have not been canvassed. It may be fairly assumed that most of them were recovered to the point at which further treatment seemed unnecessary. Seven cases of external otitis, receiving only one treatment, were checked later and found to have recovered probably within the usual one to three days limit for return visits. Only a few cases which were followed failed to respond and it is quite likely that these are related to allergies or a weakened systemic condition of some kind which was not diagnosed. A high percentage of cases treated, whether otitis media or external otitis, responded favorably within three treatments and four or five days time. The cure in these cases was judged by drying up of a discharge and exudate as well as remission of subjective symptoms. Some cases, especially of chronic otitis media and external otitis, had several attacks over a three to four year period. It is known that some cases of otomycosis were included, some with greenish pus resembling pyocyaneous, and many of the otitis media cases were quite chronic and recurrent for years.

SUMMARY AND DISCUSSION

Twenty-five cases with acute otitis media, twenty-four with chronic otitis media, and eighty-three with external otitis were given the same local and systemic treatment without any attempt to classify them according to the cause of the trouble or type of infection. Systemic treatment consisting of an antibiotic, such as achromycin, chloromycetin, tao, mysteclin V, or ilosone, was used in most cases of acute otitis media and others in which there was fever, marked swelling or pain. The treatment consisted of thorough cleaning of the ear at each treatment, followed by 10 per cent aqueous mercurochrome and then sulfadiazine powder. It is believed the physical drying effect of the powder is just as important as its antiseptic properties. The powder must not be used in excess or in too small quantity, but may vary some according to the amount of discharge. It should be applied with a powder blower.

Most cases responded within one to three treatments and in four to five days time. The results are far better than with any other treatment used by this author.

Its use is definitely limited by the ability of the physician to thoroughly clean the ear and to know what he sees when looking at an ear. It is not uncommon to see patients who have been treated for a month with penicillin injections without any attempt to clean out a heavy purulent discharge. A ¾ inch piece of match stick was recently removed from an ear which had been so treated. Such methods are little short of malpractice.

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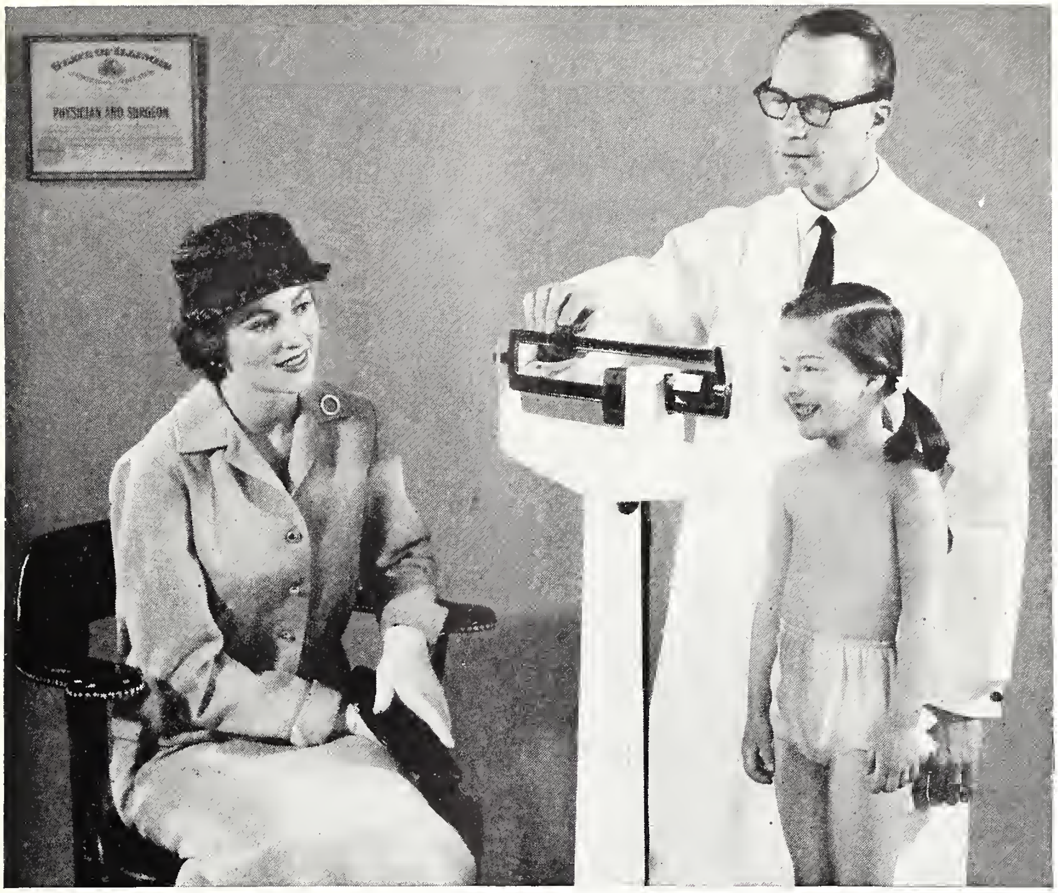

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The authors are of the opinion that Nilevar is a highly useful anabolic agent for influencing weight gain in underweight children.

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Nilevar is supplied as tablets of 10 mg., drops of 0.25 mg. per drop and ampuls of 25 mg. in 1 cc. of aqueous solution. Further dosage information in Searle Reference Manual No. 4.

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*Brown, S. S.; Libo, H. W., and Nussbaum, A. H.: Norethandrolone in the Successful Management of Anorexia and "Weight Lag" in Children, Scientific Exhibit presented at the Annual Meeting of the American Academy of Pediatrics, Chicago, Oct. 20-23, 1958.

Case Reports

Pregnancy Complication

Idiopathic Thrombocytopenia Purpura Treated With Steroids and Splenectomy

WILLIAM D. HOADLEY, M.D., *Kansas City*

IDIOPATHIC THROMBOCYTOPENIA PURPURA is a relatively unusual complication of pregnancy. Since the first reported case in 1862 by Barnes,[1] there have been only 84 reported pregnancies in 62 mothers with idiopathic thrombocytopenia purpura.[2, 3] The first reported case treated with cortisone appeared in 1957.[4] The following case represents inadequate control of symptoms by moderate dosage of steroids and successful splenectomy in the second trimester.

REPORT OF CASE

A 26 year old Negro female entered Kansas City General Hospital on July 1, 1958, with the chief complaint of "red spots all over my body."

Present History.—One and one half weeks prior to admission the patient noted onset of red spots over her ankles which increased, covering the arms and legs. She also noted bruises over her body which were not associated with trauma. The patient admitted taking an unknown amount of quinine five months previously in an attempt at abortion. The patient was pregnant at the time of admission to the hospital. She also had taken a "sulfa preparation" four months previously for a urinary tract infection.

Review of Systems.—Findings were normal except the patient noted bleeding gums upon brushing the teeth. The last normal menstrual period was January 14, 1958.

Past History.—The patient was Gr. Vi, P. III, Ab. II. The patient had a urinary tract infection four months previously.

Family History.—The mother is 60 years old, living and well. The father died at age 65 of "high blood pressure." One brother is 40 years of age, living and well. Two sisters, ages 37 and 30, are both living and well.

Physical Examination.—The blood pressure was 130/80. The patient was a well developed, well nourished Negro female in no acute distress. There was generalized purpura and petechiae over the skin. Tourniquet test for capillary fragility was positive. There were no enlarged lymph nodes. There were purpuric areas on the lips, palate and gums. The spleen was not palpable. The uterus was consistent with 24 weeks' pregnancy. The remainder of the physical examination was within normal limits.

Laboratory Examination.—Hg. was 10.6; white blood count 5,950 with a normal differential; 14,000 platelets; bleeding time was 3 minutes 20 seconds (Duke), clotting time was 2 minutes (Lee-White), no clot retraction, LE preparations were negative. Urinalysis showed specific gravity 1.007, albumin and sugar negative, benzidine positive, occasional squamous epithelial cells, T. P. 5.7, albumin 4, globulin 1.7. Direct Coombs test was negative. Bone marrow showed accelerated erythropoeisis and megakaryocytic hyperplasia.

Course.—The patient was started on Prednisolone, 40 mg. per day. The platelet counts ranged from 6,000 to 30,000 and the purpura persisted until July 23 when the patient had an episode of rectal bleeding associated with drop in blood pressure and tachycardia. The patient was given a transfusion with 1 unit of fresh plastic bag blood with resultant cessation of bleeding. At this point the patient was scheduled for a splenectomy because of poor response to moderate dosage of steroids, and the patient was approaching the third trimester. A spleen weighing 145 grams was removed without difficulty. The platelet count was 16,000 the morning of operation and 38,000 several hours postoperatively. The pathologist's report read "Spleen showing mild congestion and scattered lipid granulomata." The platelet counts did not increase following operation but there was good clinical improvement. After operation the patient was maintained on 20 mg. of Prednisone and discharged.

Second Admission.—The patient was admitted to the hospital on Sept. 29, 1958. She entered the hospital because of premature rupture of membranes (36 weeks). No petechiae were noted at that time and the platelet count varied from 25,000 to 30,000. On Oct. 8, 1959, spontaneous labor began, resulting in an uncomplicated delivery of a 5 pound, 3 ounce, infant. There was no evidence of petechiae or purpura in the infant. Minimal blood loss was encountered. The patient's platelet count was 118,000 two days postpartum. The infant's platelet count 24 hours postpartum was 55,000. The patient was maintained on 10 to 15 mg. Prednisone, which was slowly reduced and discontinued about four weeks postpartum because of weight gain, edema and Cushinoid appearance. No further clinical symptoms were apparent two months postpartum. The tourniquet test remained positive and the platelet count was 64,000 at that time.

DISCUSSION

It is felt that this case fits all criteria for the diagnosis of idiopathic thrombocytopenia purpura, that is, thrombocytopenia, purpura, normal or elevated bleeding time, normal clotting time, poor or absent clot retraction, capillary fragility and absence of other etiologic factors producing thrombocytopenia. This patient had taken a drug (quinine) which is notorious for producing dys-

Snapping Hip

VICENTE G. SISON, M.D., *Kansas City*

An uncommon, but always trying, problem, is that of the audibly, or palpably, snapping hip. Review of the literature reveals little has been written on the subject.

Snapping hip may be physiologic in children. In adults it may be physiologic or pathologic. Some, in fact, practice the trick to amuse their friends. As a rule, this type causes no disturbance or discomfort to the patient. Snapping hips that do not produce pain are classified as physiologic, while those that are symptomatic are considered pathologic. Although commonly unilateral, the process may involve both hips.

In the past ten years at St. Joseph Hospital, where an average of 5,223 orthopedic patients are seen in a year, only two cases were proved to be pathologic.

CASE REPORT

Case 1. J. H., a normally active 16 year old female, first experienced a snap in the left hip while bowling. In the several ensuing weeks, she found that she could produce the snap at will until she began to have pain and discomfort.

At surgery, an incision on the lateral left thigh was made down to the ilio-tibial band, the posterior border of which was abnormally thickened. This area was resected and resutured anteriorly and posteriorly to the tensor fascia.

Postoperative course was uneventful; the patient was allowed up with crutches after five days. Examinations over a period of five years have shown complete subjective and objective evidence of a cure.

Case 2. E. B., a healthy 14 year old female, was playing basketball when she slipped and fell, landing on her left hip. No bony injury resulted; however, she developed a palpable and audible snap in the left hip. The snap was produced voluntarily on slight flexion and external rotation of the thigh. Gradually, pain became a serious complaint.

Under caudal anesthesia with the patient lying on her right side, incision was made on the lateral left thigh. The ilio-tibial band and gluteus maximus were identified. The patient was then instructed to snap her hip. In doing so it was noticed that the thickened portion of the ilio-tibial band slid over the greater trochanter with a resulting snap. The thickened band was incised and resutured to the anterior portion of the tensor fascia. Patient was again instructed to snap her hip but this time was unable to do so. Five days postoperatively she was allowed to be up with crutches.

After discharge, however, the patient developed a tendency to favor the left leg. Presumably because of this, she fell again, this time injuring her right hip. A similar snap developed in her right hip for which rehospitalization was advised.

Under caudal anesthesia with the patient on her left side, an incision was made on the lateral right thigh. Again, the thickened portion of the posterior ilio-tibial band was noted to slide over the greater trochanter with a snapping sound. This was incised and resutured to the anterior portion of the tensor fascia.

No complications followed the ambulation of the patient on the sixth postoperative day. Follow-up for about one year appears to show a good surgical result.

ANATOMY

The gluteus maximus, the most superficial muscle of the gluteal region, arises from the posterior gluteal line of the ilium and posterior surface of the sacrum and from the coccyx. It passes obliquely downward and lateralward across the greater

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Pregnancy Complication—Continued

crasia, however, it was felt that this one dose at least five months prior to the onset of symptoms could be excluded as an etiologic factor.

This patient demonstrated poor response to moderate doses of steroids, little platelet response to splenectomy but good clinical response, and platelet response to a certain degree following delivery. Excellent discussions of the effects of this disease on maternal and fetal mortality have been previously presented,[2, 3] uniformly agreeing that maternal and fetal mortality are increased with splenectomy during pregnancy.

Damashek et al.[5] have pointed out that good response in idiopathic thrombocytopenia purpura is obtained with doses of Prednisone up to 150 mg. per day in the majority of patients. Results from splenectomy are too often transient and in the pregnant patient the increased maternal and fetal mortality would suggest that this procedure be used only in those cases which do not respond to medical measures.

Kansas City General Hospital.

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trochanter and is inserted into the ilio-tibial band of the fascia lata.

There is a normal longitudinal thickening of the fascia lata, first recognized by Zur Verth, from the iliac crest downward in the line of the posterior margin of the greater trochanter. It is easily demonstrated by making a longitudinal slit in the fascia posterior to the trochanter and passing a finger backward underneath the fascia. A ridge is then palpable on the deep surface of the fascia. Adduction of the leg renders the fascia and this band tense so they press firmly against the bone. To this thickening Zur Verth applied the term "Tractus Cristo Femoralis."

PHYSIOLOGY

Snapping hip is produced by adduction of the involved thigh causing the thickened band to press firmly against the bone and to catch just back of the posterior border of the greater trochanter. As the thigh is flexed, the trochanter passes backward carrying with it the taut fascial band until a certain amount of flexion is reached and the trochanter no longer can prevent the thickened band from slipping forward and thereby producing a snapping sound.

ETIOLOGY

Several factors must be considered in the evaluation of snapping hip: inflammed bursae surrounding the greater trochanter, malformations of the hip joints, and gluteus maximus spasm. Binne[1] has reported two cases, one of which revealed a sausage-shaped thickening of the fascia lata, and the other, the "snapper" was the anterior border of the gluteus maximus. Jones[2] cited two cases in which the snapping was due to the tendon of the gluteus maximus. Pruitt[3] reported that all of his cases were due to some abnormality of the fascia lata or the greater trochanter whereby the fascia was caught behind the trochanter. Whitman[4] considers that the snap is due to the friction between the tendon of the gluteus maximus and the greater trochanter. The evidence seems to favor the ilio-tibial band and the gluteus maximus as the structures involved. Whether this condition is congenital, developmental or traumatic, cannot be stated with assurance. In the two cases reported however, trauma was definitely felt to be the causative factor.

DIAGNOSIS

Patients commonly report that they have a "snapping hip"; the diagnosis simply requires confirmation. While the condition may not be disabling, it is usually uncomfortable, patients frequently stating that the snapping causes a "sickening feeling." The snap can always be felt and may be definitely audible. Mayer[5] reported four cases, one of which produced a snap audible for thirty feet. To demonstrate the snap, allow the patient to walk ahead of the examiner, who places his hand on the patient's hip. As the patient walks, the snap can be felt; on examination, external rotation and slight flexion of the thigh elicits the snap.

TREATMENT

Treatment may or may not be surgical. The condition should be explained to the patient and he should be reassured of its benign nature.

Mayer[5] has reported one case which was treated satisfactorily by adhesive plaster straps and pads placed behind the trochanters. In the majority of symptomatic cases, however, surgery is the treatment of choice.

With the patient under local anesthesia, he may be able to produce the snap himself. The causative factor, thus identified (in most cases the thickened portion of the ilio-tibial band) is then incised and sutured to the neighboring structures. Dickinson[6] recommends suturing to the periosteum; Pruitt[3] recommends the simple division of the obstructing band under local anesthetic.

CONCLUSION

1. Causative factor of a snapping hip is the thickened posterior ilio-tibial band or gluteus maximus sliding across the greater trochanter.
2. Operation for relief of this condition is probably best done under local anesthetic.
3. Early mobilization of the affected limb is important.

St. Joseph Hospital

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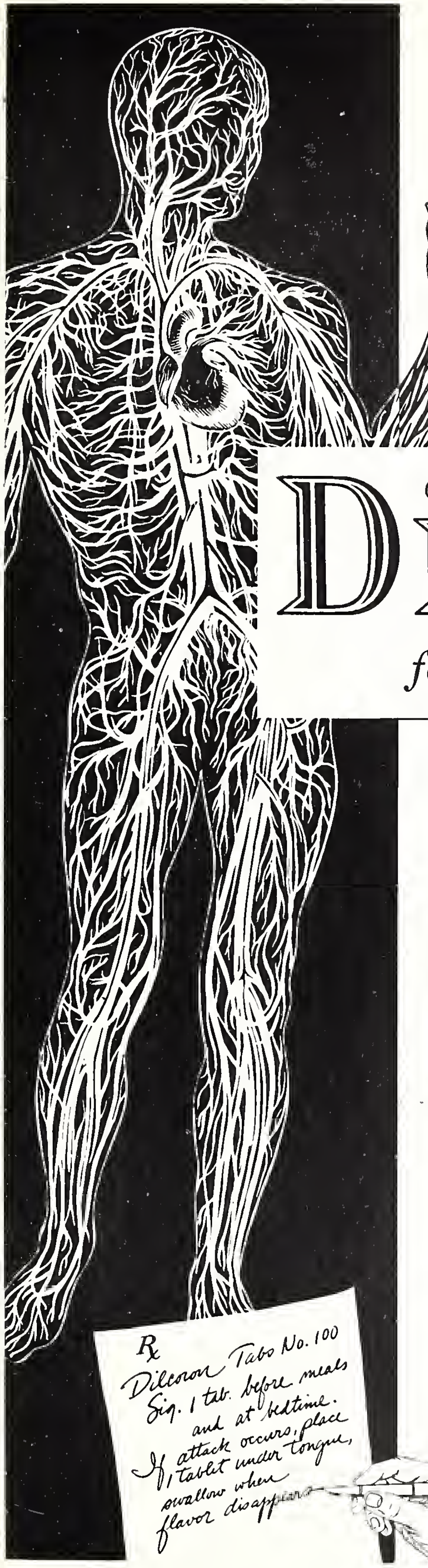
A.M.A. COUNCIL TO HOLD NUTRITION MEETING MAY 8

Heart disease and disorders of nutrient absorption will be discussed at a Symposium on Nutritional Problems in medicine on May 8 in Nashville, Tenn.

The one-day symposium is being sponsored by the American Medical Association's Council on Foods and Nutrition and the Vanderbilt University Medical School. It will be held in the Vanderbilt University ampitheater, opening at 9:00 a.m.

The morning session will be devoted to the nutritional aspects of heart disease. The after noon session will deal with celiac disease and pancreatic fibrosis, and absorptive difficulties following gastrointestinal surgery.

The meeting is open to physicians, nurses, dietitians, medical students and other interested persons.



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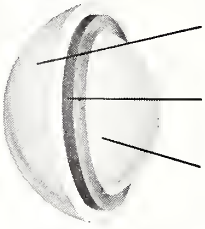

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President's Page

The recent Annual Session demonstrated clearly the importance of the committee member in the work of the Missouri State Medical Association. Many of the committee reports covered matters of importance to all members and to medical practice. In many other instances actions of the Council were based on preliminary work done by one of the standing or special committees.

Ralph Perry, M.D.

Committee work at times becomes laborious and committee members who give of their time and effort for the work of the Association deserve the thanks of all members.

Most committees are made up of members who serve three year terms so that at no time is there a totally new committee, thus insuring continuity of the work of committees. At the recent Session new members were named to fill the expired terms on the committees. I hope that every newly appointed committee member and chairman will advise the office quickly of his willingness to serve.

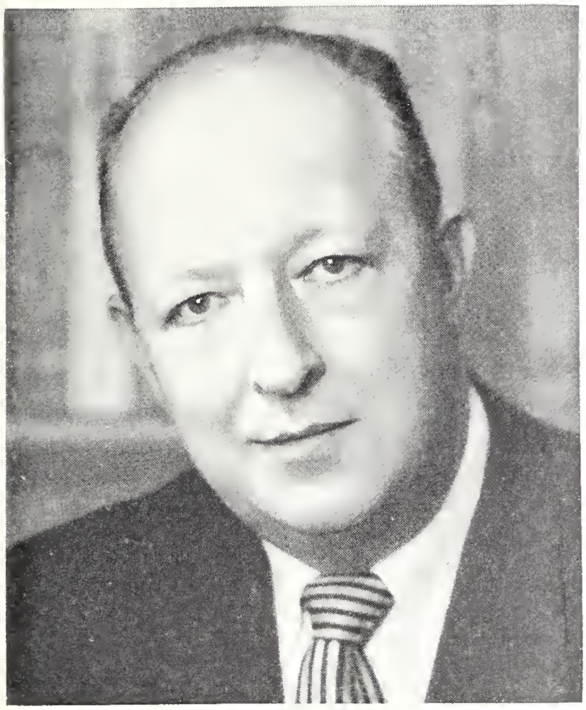
As I take over the Presidency, I realize keenly that my success as named leader of the Association is only partially dependent on me—that the important work is done by cooperation of many persons, in fact, the whole membership, but that certain persons are in position to make a little greater contribution than others. These include officers, councilors, officers of component societies, and in great measure, the members of the committees who so often do the groundwork on which decisions and actions are based. And it is through these officers and members of committees that the Association member so often has a voice in the affairs of the profession. I urge that the membership give support and help to these officers and committee members.

Ralph Perry

EDITORIALS

R. O. Muether, M.D., St. Louis President-Elect

Raymond Oliver Muether, M.D., St. Louis, was selected by the House of Delegates to serve as President-Elect for the coming year. He will serve in that capacity until the next Annual Session when he will be installed as President of the Association.



R. O. Muether, M.D.

Dr. Muether has been interested in medical education and medical organizations all of his professional life. He received his M.D. degree from St. Louis University School of Medicine in 1929 and became an instructor there in 1932. He became a member of the St. Louis Medical Society in 1931.

Dr. Muether was born in St. Louis July 21, 1905, and is a graduate of Irving School and Yeatman High School. He finished his premedical studies at St. Louis University in 1925 and his medical work in 1929. He was in internship and residency from 1929 to 1932 and in 1933 received an M.S. in Internal Medicine from St. Louis University Graduate School. He held an Eli Lilly fellowship at St. Louis University.

At completion of residency training, Dr. Muether was appointed to the staff of St. Mary's Group of Hospitals and to the faculty of St. Louis University School of Medicine. He was instructor of internal medicine from 1932 to 1935, senior instructor in internal medicine from 1935 to 1945. In 1945 he was appointed associate professor, a position which he still holds. At present he is also chief of the medical section of St. Louis County Hospital and director of clinical laboratories of St. Louis County Hospital. He was director of a course in clinical microscopy and chemistry from 1938 to 1953, and director of clinical laboratories of the St. Louis Group of Hospitals from 1945 to 1953. He is a diplomate of the American Board of Internal Medicine.

His other medical activities include lectures in clinical microscopy, ward rounds, Journal Club, Medical History meetings, tumor conferences, lectures to medical technician students.

Dr. Muether became editor of MISSOURI MEDICINE in May 1949 and served in that capacity until January 1953. He became Councilor of the Third Councilor District in 1952 and served as Vice Chairman and Chairman of the Council. He has served as Treasurer of the Association for the last year.

He was married to Evelyn Merod in 1929 and they have two sons, John aged 24 and Robert aged 22.

Organizations in which Dr. Muether is or has been active are numerous. He was councilor of St. Louis Medical Society from 1950 to 1953 and president of the society in 1954-1955. He is secretary-treasurer of the St. Louis Society of Internal Medicine and was president of the organization in 1956. He is a founder and past president of both the St. Louis Internists' Club and the St. Louis American Board Club. He is a charter member and past president of the Doctors' Medical Foundation. He is a past president of the St. Louis Rheumatism Association. He is a member of the American Society of Clinical Pathology, St. Louis Pathological Society, Society of American Bacteriologists, East Missouri Chapter of the Society of American Bacteriologists, Central Society for Clinical Research, Central Clinical Research Club, Interurban Research Club, American Rheumatism Association, American College of Physicians, American Goiter Association, Phi Beta Pi medical fraternity, Alpha Omega Alpha and Sigma Xi.

Dr. Muether has been author or coauthor of 65 medical articles.

Other officers elected were: Secretary, John I. Matthews, M.D., Jefferson City; Treasurer, Charles R. Doyle, M.D., St. Louis; Delegates to the American Medical Association, A. W. Neilson, M.D., St. Louis, and Richard H. Kiene, M.D., Kansas City; Alternates, Dean Sauer, M.D., St. Louis, and Rolla B. Wray, M.D., Nevada; Vice Presidents, James

R. Meador, M.D., Clayton, G. D. Shull, M.D., Jefferson City, and J. J. Wimp, M.D., Kirksville; Speaker of the House, Oscar P. Hampton, M.D., University City; Vice Speaker of the House, W. C. Mixson, M.D., Kansas City; Chairman of the Council, J. H. Summers, M.D., Lebanon; Vice Chairman, Donald M. Dowell, M.D., Chillicothe.

Atlantic City to Host A.M.A. Annual Meeting

Some 15,000 physicians will gather in Atlantic City, N. J., next June 8-12 for the 108th annual meeting of the American Medical Association.

Besides physicians, the meeting will be attended by residents, interns, nurses, technicians, students and physicians' wives and members of their families.

The five-day convention—the largest medical meeting in the world—is being held in Atlantic City for the 16th time. The first meeting was held there in 1900.

Doctors will have the opportunity to catch up on hundreds of aspects of a rapidly-changing medical world. This information will be presented in the form of scientific exhibits, lectures, motion pictures, panel discussions, televised surgical procedures and industrial exhibits.

New medical research findings and methods of handling daily medical problems will be reported by 500 physicians in scientific papers or participation in symposia and discussion groups.

There will be more than 300 scientific exhibits and a similar number of industrial exhibits on display at the famed Convention Hall. The latter group will be exhibited by pharmaceutical houses, medical equipment firms and other manufacturers.

The House of Delegates will meet throughout the week in the Traymore Hotel, headquarters for the meeting. The 20 scientific sections of the A.M.A. and five government medical services will also be represented in the House.

First order of business for the House will be the selection of a physician to receive one of medicine's highest honors—the Distinguished Service Award. He will be elected from three persons, whose names are submitted by the Board of Trustees. Nominees are screened by the Board from names submitted by the general membership.

The opening session will be addressed by Dr. Gunnar Gundersen, La Crosse, Wis., outgoing president, and his successor, Dr. Louis M. Orr, Orlando, Fla.

A president-elect to serve one year and be inaugurated as president in 1960 will be elected during the meeting.

For the fourth year, high school students who have won special A.M.A. awards in the National Science Fair will show their prize-winning work at the scientific exhibit.

The annual film program will be highlighted by the presentation of 60 medical motion pictures.

The Woman's Auxiliary to the A.M.A. will hold its meeting Tuesday through Thursday. Representatives of the 75,000 members—all doctors' wives—will discuss their program in sessions at the Chalfonte-Haddon Hall.

Other sidelights of the meeting will be the special art exhibits including that of the American Physician's Art Association, and the 43rd annual American Medical Golfing Association tournament.

For advance hotel and meeting registration information, contact the Convention Services Department, American Medical Association, 535 North Dearborn Street, Chicago 10, Illinois.

National Hospital Week, May 10-16

The nation's hospitals, through the American Hospital Association, have invited their closest ally, the medical profession, to help them develop greater understanding and appreciation of their services and contributions to the American people.

This year's program, centered in a seven-day observance of National Hospital Week, May 10 to 16, will emphasize the theme of "More Roads to Recovery." An explanation of these "roads"—better care, improved technics and skills, greater numbers of personnel to apply the dramatic successes of medical science—will help offset a growing myth that hospital costs are greater than the services received.

Such distorted stories not only jeopardize public regard for the hospital but for the entire medical team, including the practicing physician. Consequently, it is to mutual advantage to work together toward overcoming these detrimental impressions which are gaining some acceptance.

Kits and other working tools, prepared by the American Hospital Association, have been sent by the A.M.A. to the executive secretaries of each state and metropolitan medical society, together with the names of the contacts of state hospital associations and metropolitan hospital councils, so that the medical profession may better coordinate its promotional efforts on behalf of the Week.

Through the use of public forums, tours of hospital facilities, talks to community groups, and radio, television and newspaper facilities, the story of the unprecedented hospital services now available—resulting in shorter hospital stays, employment of all the medical advances and healthier and longer lives—can be told convincingly.

"More Roads to Recovery" are the patient's reward for the close harmony and utilizations of the tools and skills of both the hospital personnel and the medical profession. These rewards can be made more meaningful by participation in National Hospital Week.

WHEN MORE THAN MILD SEDATIVE EFFECT IS DESIRED

Consequently, TENTONE is more useful than other ataractic drugs in two areas: (1) mild to moderate conditions—when more than mild sedative effect is sought, (2) middle range of moderate to severe cases—when less than psychopathology is involved.

Indications include ■ common anxiety-tension states ■ obsessive-compulsive behavior ■ neurosis ■ depression ■ situational anxiety and hysteria

And the emotional components of: ■ agitation ■ restlessness ■ tremors ■ insomnia ■ alcohol- and drug-withdrawal syndrome ■ hyperkinesis ■ prenatal anxiety ■ rheumatic disorders ■ dermatoses ■ menopausal syndrome ■ premenstrual tension ■ peptic ulcer, other g.i. disorders ■ asthma, other allergy ■ multiple sclerosis, arteriosclerosis ■ malignancy, other progressive diseases

POSSIBLE POTENTIATION OF ANALGESICS AND NARCOTICS

Since tranquilizing drugs may potentiate the action of pain-relievers, sedatives, and barbiturates, they should be used with caution in conjunction with them, or to achieve a greater response to these drugs in various conditions when desired. They may also be useful in reduction of effective dosage to better tolerated, or non-habituating levels.

ADAPTABLE LOWER DOSAGE RANGES

Dosage must be individualized to severity of condition and response desired.

In mild to moderate cases: varies from 30 to 100 mg. daily.

In moderate to severe cases: from 75 to 500 mg. daily.

In psychotic or institutionalized patients, TENTONE may be useful as a substitute when toxicity precludes effective dosage of other phenothiazines, or as maintenance after hospitalization. Dosage may range from 100 to 1500 mg. daily in divided doses.

Supplied: 10 mg., 25 mg. and 50 mg. tablets

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Musings of the Field Secretary

Amidst a not-too-uncommon Kansas blizzard some 500 people from various sections of the United States descended, in one way or another, on Wichita, Kansas, March 5-7, to attend the 14th National Conference on Rural Health, sponsored by the American Medical Association. Approximately two dozen speakers discussed problems of true significance to better rural health. Highlights of the talks of some of the speakers included:

According to Earl L. Butz, Ph.D., dean of agriculture at Purdue University, Lafayette, Indiana, if those services a community decides it must have are not provided by local people and local organizations, they will be provided by the government. Therefore, there is a bigger need for local communities to assume the responsibilities put upon them by our private enterprise system.

Aubrey D. Gates, director of the A.M.A. Division of Field Services, said that the first step in meeting the needs of the aging is an inventory of community assets in the form of its elder citizens—their number, their problems, and their experiences that can be used by the community. Then their needs must be measured and decisions made about how and what is necessary to meet them.

He pointed out that many steps are being taken to help communities meet the needs of their aging citizens. These include requests by the A.M.A. that the Congress make available funds to help in the construction of community nursing homes; plans and suggestions offered for building and maintaining safer, more modern facilities; plans for visiting nurse service; suggestions for better home care, and plans for more adequate insurance for the aged. Churches and other organized community groups need to work together in developing programs for the aged.

Dr. Franklin D. Murphy, chancellor of the University of Kansas, pointed out that we must do more to "avoid waste of human resources, both of mind and body," through better conservation of human talent and its proper application. As one example of this conservation and application, he believes that in rural America there must be better planning to provide area medical services. He suggests a large general hospital in one community with small satellite hospitals in the periphery, with patients flowing freely in both directions. In this way, he feels that costly duplication of facilities can be avoided and maximum use can be made of limited personnel and talent.

Charles H. Coghlan, executive vice-president of Ohio Medical Indemnity, Inc., Columbus, Ohio, said that there is a growing demand for health insurance coverage for home and office calls, in addition to surgical and specific medical coverage. He believes ways will be found to meet this new demand.

John Pond, management consultant to the Larimore County Hospital, Boulder, Colorado, pointed out that good hospital care is expensive and will possibly continue to increase. The problem seems to be one of having the patient understand the necessity for the expenses. He recommends that at least 80 cents of each hospital expense dollar should be allocated for hospital services, 12 cents for administration and 8 cents for plant operation and maintenance. He emphasized that patient satisfaction is increased by those things that money cannot buy—kindness, sympathy, courtesy, thoughtfulness, a cheerful disposition, respect for the dignity of the individual.

Dr. Louis M. Orr, president-elect of A.M.A., Orlando, Fla., stated that scientific, technological, educational and construction progress has helped to make the present-day rural practitioner a first-rate medical force in the community and throughout the nation. He pointed out, however, a problem which has developed over the past few years, that of fewer top-notch students making application for entrance to medical schools. There seems to be a number of factors causing this reduction, some of which are the increasing expense and length of training period for a physician, opportunities for employment in other fields such as engineering, and the tendency in many high schools over the country to be somewhat lax in placing due emphasis upon science courses and health careers.

Dr. C. R. Brott, Beatrice, Nebraska, reported that his hospital has developed a modified "progressive care program" in which the seriously ill patient received intensive care in a special unit. The less seriously ill patient is moved to another area where his care is less intensive and in turn less expensive. This area is called the "convalescent or geriatrics annex."

Dr. F. S. Crockett, Lafayette, Indiana, chairman of the A.M.A. Council on Rural Health, explained that the real purpose of all these rural health conferences has been to "help people help themselves to better health." Progress toward the achieving of this basic purpose will continuously be gained by a closer union of state medical association committees on rural health, with like committees in the agricultural extension service, the Farm Bureau, the Grange and other groups.

THIRD PARTY MEDICINE

An interesting and informative panel discussion on "Present Day Concepts of Third Party Medicine" was presented at a meeting of the St. Louis County Medical Society on Wednesday night, March 11. Speakers on the panel were Cyril Costello, M.D., assistant professor of clinical surgery, Washington University School of Medicine; Eugene Bricker, M.D., associate professor of clinical sur-

To the relief of musculoskeletal pain,
new MEDAPRIN*
adds restoration of function

Analgesics offer temporary relief of musculoskeletal pain, but they merely *mask* pain rather than getting at its *cause*. New Medaprin, in addition to bringing about prompt subjective improvement, promotes the *restoration of normal function* by suppressing the inflammation that *causes* the pain.

Medaprin, Upjohn's new analgesic-steroid combination, contains aspirin plus Medrol,** the corticosteroid with *the best therapeutic ratio in the steroid field*.† Instead of suffering recurrent discomfort because of the "wearing off" of analgesics, the patient on Medaprin experiences a smooth, *extended* relief and more normal mobility.

Indications: Medaprin is indicated in mild-to-moderate rheumatic and musculoskeletal conditions, including rheumatoid arthritis, deltoid bursitis, low back pain, neuralgia, synovitis, fibromyositis, osteoarthritis, low back sprain, traumatic wrist, sciatica, and "tennis elbow."

Dosage: The recommended dosage is 1 tablet q.i.d. The usual cautions and contraindications of corticotherapy should be observed.

Supplied: In bottles of 100 and 500.

Formula: Each Medaprin tablet contains

- 300 mg. acetylsalicylic acid, for prompt relief of pain
- 1 mg. Medrol, to suppress the causative inflammation
- 200 mg. calcium carbonate, as buffer

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†RATIO OF DESIRED EFFECTS TO UNDESIRED EFFECTS

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gery, Washington University School of Medicine, and Mr. Harold Gibbons, president of the St. Louis Labor Health Institute, secretary-treasurer of Local 688, vice-president of the International Brotherhood of Teamsters.

Mr. Gibbons, Dr. Bricker and Dr. Costello were panelists.

The major portion of the discussion was centered on labor health centers. Mr. Gibbons stated that he fully agreed that the medical director and the medical staff of a labor health center should control all aspects of the medical operations without interference from lay personnel. However, he pointed out that if the medical staff fails to assume the responsibility of asserting this right of control they have little squawk coming if things don't go to suit them.

Discussion from the floor was general.

In his explanation of the administrative operation of the St. Louis Teamsters Labor Health Institute, he said that there is a strict separation of the control of medical and administrative matters and policy.

Dr. Costello stated that the Labor Health Institute, in his opinion, was doing a fine job. He indicated much of this success can be attributed to the policies, explained by Mr. Gibbons, of medical direction of medical matters. Dr. Costello said that it is important for the recommendations of the A.M.A. regarding the employment of physicians by "third parties" be given great weight.

Dr. Bricker posed the question of the limitation of free choice of physician in their labor health center plans and the possible effect on the quality of medical care.

Judging from the good attendance and amount of discussion from the floor your reporter believes this program was stimulating, informative and an idea for other medical society programs.

NEW MEMBERS

Allen, James R., M.D., Rockport. Nodaway-Holt-Atchison-Gentry-Worth Counties Medical Society.

Allen, S. Lloyd, M.D., Rt. 6, Box 404B, Parkville. Clay County Medical Society.

Binder, Morton A., M.D., 4652 Maryland, St. Louis 8. St. Louis Medical Society.

Blum, Fred G., Jr., M.D., 1408 Bluebird Terrace, St. Louis 17. St. Louis Medical Society.

Bolinske, Robert E., M.D., 950 Francis Place, Clayton 5. St. Louis County Medical Society.

Christensen, Roger F., M.D., 211 S. 3rd, Louisiana. Pike County Medical Society.

Duval, Addison M., M.D., Division of Mental Health, Jefferson City. Cole County Medical Society.

Fairshter, Alex E., M.D., No. 9 Blackpool Lane, St. Louis 24. St. Louis County Medical Society.

Greenback, Arthur J., M.D., 7452 Florissant, St. Louis 21. St. Louis Medical Society.

Groce, George, M.D., 607 Court Street, Fulton. Callaway County Medical Society.

Hansbrough, Eugene T., M.D., 623 Pine Blvd., Poplar Bluff. Butler-Ripley-Wayne County Medical Society.

Jackson, Vernon B., M.D., State Hospital No. 1, Fulton. Callaway County Medical Society.

McLain, B. M., M.D., 724 Cynthia, Poplar Bluff. Butler-Ripley-Wayne County Medical Society.

Morgan, Harry C., M.D., 42 Faculty Lane, St. Louis 5. St. Louis Medical Society.

Ritterbusch, James, M.D., State Hospital No. 1, Fulton. Callaway County Medical Society.

Roodman, Herman J., M.D., 15 N. Brentwood, Clayton 5. St. Louis County Medical Society.

Sargent, John P., M.D., 707 Tanner, Sikeston. Semo County Medical Society.

Speno, Angelo A., M.D., 601 S. Brentwood, Clayton 5. St. Louis County Medical Society.

Stewart, Robert B., M.D., Professional Bldg., Springfield. Greene County Medical Society.

Walden, James M., M.D., 2204 A. East 31st Street, Kansas City. Jackson County Medical Society.

Walk, Lloyd F., M.D., 1515 Lafayette, St. Louis 4. St. Louis Medical Society.

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Provides comprehensive bactericidal action effective against virtually all bacteria likely to be found topically.

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Ointment: Tubes of ½ and 1 oz. and tubes of ⅛ oz. with ophthalmic tip.
Ophthalmic Solution: Bottles of 10 cc. with sterile dropper.
NEW { **Lotion:** Plastic squeeze bottles of 20 cc.
Powder: Shaker-top bottles of 10 Gm.

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brand **ANTIBIOTIC OINTMENT**

Offers combined antibiotic action for treating conditions due to susceptible organisms amenable to local medication.

Ointment: Tubes of ½ oz., 1 oz. and ⅛ oz. (ophthalmic tip).

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News—Personal and Professional

The *Carthage Press* carried a picture and story about **Leroy Simmons**, M.D., Sarcoxie, and his 53 years of practice, as well as his military experience.

More than 500 persons attended a testimonial dinner for **Claude J. Allen**, M.D., Rich Hill, on February 27 at the Rich Hill high school auditorium. It was in honor of Dr. Allen's completion of 50 years in practice.

At a banquet of the Dunklin County Chapter of Licensed Practical Nurses held in late February, **Dr. and Mrs. Paul Baldwin**, Kennett, were guests.

Two physicians recently named to the advisory committee of the University of Missouri School of Medicine are **Arthur W. Neilson**, M.D., St. Louis, and **Edwin F. Vitt**, M.D., St. Louis.

"Diet and Drugs in the Treatment of Diabetes" was the subject of a talk given by **Thomas W. Burns**, M.D., Columbia, at a public education meeting held at the University of Kansas Medical Center on March 10.

Joseph E. Flynn, M.D., Columbia, was recently appointed to serve a four year term on the test committee of the National Board of Medical Examiners.

Thomas B. Hall, M.D., Kansas City, was recently elected to the board of the Kansas City Social Hygiene Society.

The Jasper Branch of the American Cancer Society was addressed by **A. M. Evans**, M.D., Columbia, at a meeting in Jasper in February.

Questions at a home room meeting in the Sikeston school were answered by **Carl G. Popp**, M.D., Sikeston, most of the questions dealing wth education of children in the European countries.

The American Academy of Allergy at a February meeting in Chicago named **Joseph W. Noah**, M.D., St. Louis, as secretary.

"What's New in Medicine" was the title of a talk presented by **Josephine Baker**, M.D., Moberly, before a meeting of the American Association of University Women in Moberly.

About 100 delegates at the Central Missouri Chapter of the Council for Exceptional Children heard an address by **W. Ray Hepner, Jr.**, M.D., Columbia, at a meeting in Columbia.

William H. Masters, M.D., St. Louis, has been elected president of the board of directors of the Family and Children's Service.

The Missouri State Association of Licensed Practical Nurses, Cape Girardeau Chapter, were addressed by **Charles P. McGinty**, M.D., Cape Girardeau, at a recent meeting.

The 1959 Howard University Alumni Achievement Award was presented to **William H. Sinkler**, M.D., St. Louis, at a meeting in Washington, D. C.

"Indigent Care" was the subject of a talk presented by **L. H. Ferguson**, M.D., Joplin, before a meeting of the Missouri State Nurses' Association held in Joplin.

Special awards for work in conjunction with the Jasper County Mental Health Association were presented to **Grover S. Patterson**, M.D., Carthage, and **S. W. Scorse**, M.D., Joplin, at a meeting in Joplin.

At a meeting in Marshall to which all women of the county were invited, **H. V. Guhleman, Jr.**, M.D., Jefferson City, presented an address and answered questions from the audience.

Carl A. Wattenberg, M.D., has been elected president of the St. Luke's Hospital Medical Staff Association, succeeding **Guy N. Magness**, M.D., University City. **Russell Vaughan**, M.D., was elected vice president, and **John B. Shapleigh**, secretary-treasurer.

Students preparing exhibits in the medical sciences for the Greater St. Louis Science Fair were given advice and suggestions at a meeting at the St. Louis Medical Society. Among those partici-

re-evaluating tranquilizers?

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"ability to decide correctly has increased, while the illogical response to anxiety has diminished."[1]

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IN GENERAL
ATARAX is "effective in controlling tension and anxiety.... Its safety makes it an excellent drug for out-patient use in office practice."[4]

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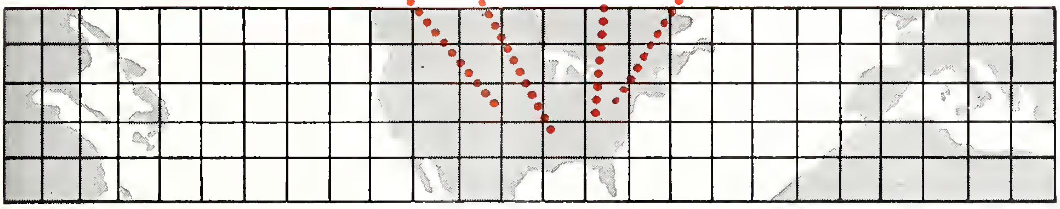
"ATARAX appeared to reduce anxiety and restlessness, improve sleep patterns and make the child more amenable to the development of new patterns of behavior...."[2]



INVESTIGATORS AGREE ON OPTIMAL ATARAX DOSAGES

For childhood behavior disorders	10 mg. tablets Syrup	3-6 years, one tablet t.i.d. over 6 years, two tablets t.i.d. 3-6 years, one tsp. t.i.d. over 6 years, two tsp. t.i.d.
For adult tension and anxiety	25 mg. tablets Syrup	one tablet q.i.d. one tbsp. q.i.d.
For severe emotional disturbances	100 mg. tablets	one tablet t.i.d.
For adult psychiatric and emotional emergencies	Parenteral Solution	25-50 mg. (1-2 cc.) intramuscularly, 3-4 times daily, at 4-hour intervals. Dosage for children under 12 not established.

Supplied: Tablets, bottles of 100. Syrup, pint bottles. Parenteral Solution, 10 cc. multiple-dose vials.

References: 1. Smigel, J. O., et al.: J. Am. Ger. Soc., in press. 2. Freedman, A. M.: Pediat. Clin. North America **5**:573 (Aug.) 1958. 3. Ayd, F. J., Jr.: New York J. Med. **57**:1742 (May 15) 1957. 4. Menger, H. C.: New York J. Med. **58**:1684 (May 15) 1958. 5. Coirault, M., et al.: Presse méd. **64**:2239 (Dec. 26) 1956. 6. Bayart, J.: Presented at the International Congress of Pediatrics, Copenhagen, Denmark, July 22-27, 1956.

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Science for the World's Well-Being

pating were **Alphonse McMahon**, M.D., **John Berry**, M.D., and **Virgil Loeb**, M.D.

G. Wilse Robinson, M.D., and **Paul Hines**, M.D., Kansas City, attended the 10th Neuropsychiatric Institute at the Veterans Administration Hospital in North Little Rock, Ark., February 26 and 27 and Dr. Robinson presented two papers.

John A. Growdon, M.D., Kansas City, was elected president of the St. Joseph Hospital Staff for 1959. **W. W. Gist**, M.D., was elected president-elect; **H. E. Linville**, M.D., secretary, and **H. H. Virden**, M.D., treasurer.

A group of 700 state and St. Louis area fund-raising chairmen of the American Cancer Society were recently addressed by **Lauren V. Ackerman**, M.D., St. Louis.

The Eastwood PTA at Raytown had as speaker at a recent meeting **Hugh L. Dwyer**, M.D., Kansas City. His subject was "Building for Health."

"In recognition of outstanding work in the field of industrial medicine," **Vencel W. Hollo**, M.D., St. Louis, has been elected a fellow of the Industrial Medical Association.

The duties of president of the Research Hospital medical staff have been assumed by **Harold V. Zuber**, M.D., Kansas City.

The American College of Allergists at its meeting in San Francisco in March installed **Cecil M. Kohn**, M.D., Kansas City, as president.

The third annual postgraduate course in geriatric medicine will be presented by Washington University School of Medicine, Division of Gerontology, in St. Louis May 21, 22 and 23. The course is tuition free and Category I credit will be granted to members of the American Academy of General Practice. Information may be obtained by addressing the Division of Gerontology, Washington University School of Medicine, 5600 Arsenal St., St. Louis 9, Mo.

ST. LOUIS ACADEMY TO HOLD SPRING SYMPOSIUM

The Fourth Annual Spring Scientific Symposium of the St. Louis Academy of General Practice will be held on Sunday, May 3, at the Chase Hotel. This annual meeting has become one of the most popular events of the Academy, combining a scientific program and social activities in which both the physician and his wife may participate. Entertainment will be provided for the ladies while the doctors attended the lectures.

Registration will begin at 1:00 p.m. on the Starlight Roof.

The scientific sessions will start promptly at 1:30 p.m. Dr. Ralph A. Reis, editor of the *Journal of Obstetrics and Gynecology,* will inaugurate the program with a discussion on "Prolonged Labor: Causes and Management." Following at 2:30 p.m., Dr. James E. Crocket, director of the Cardiovascular Laboratory, University of Kansas Medical Center, will present "Treatment of Refractory Congestive Heart Failure." At 3:45 p.m. Dr. Harry Agress, director, Midwestern Cytology Laboratory, will begin a timely presentation of "Exfoliative Cytology: An Office Procedure for the Early Detection of Cancer." Concluding the afternoon's program at 4:45 p.m., Dr. Lee T. Ford, clinical instructor in orthopedic surgery at Washington University School of Medicine, will speak on "Fractures: Management and Treatment."

This Spring Symposium has been approved for four hours of Category I medical study credit.

Upon completion of the afternoon sessions the doctors and the ladies will enjoy a cocktail hour which will be followed by a dinner on the Starlight Roof.

All physicians and their wives in the St. Louis and surrounding areas are cordially invited to attend this popular event. Reservations may be made by sending a check ($7.50 per person) immediately to the St. Louis Academy of General Practice, 4 North Eighth Street, St. Louis 1, Mo.

DEATHS

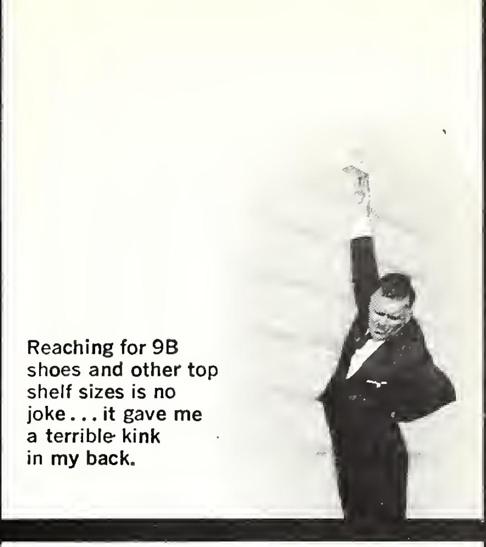
Beisbarth, Carl C., M.D., St. Louis, a graduate of St. Louis University Medical School, 1926; member of St. Louis Medical Society; aged 57; died March 13.

Siebert, Walter J., M.D., St. Louis, a graduate of Washington University Medical School, 1926; member of St. Louis Medical Society; aged 57; died March 13.

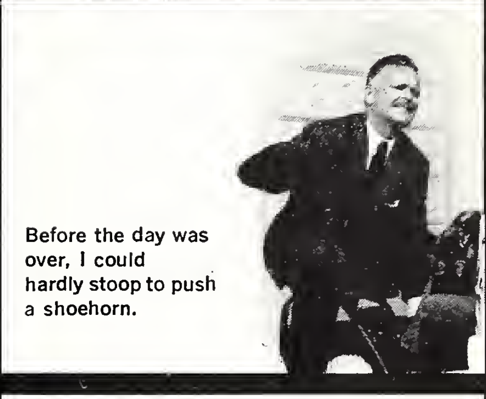
Katz, Samuel D., M.D., St. Louis, a graduate of University of Wisconsin School of Medicine, 1929; member of St. Louis Medical Society; aged 51; died March 16.

Krause, G. Lynn, M.D., St. Louis, a graduate of University of Pennsylvania Medical School, 1925; member of St. Louis Medical Society; aged 61; died March 23.

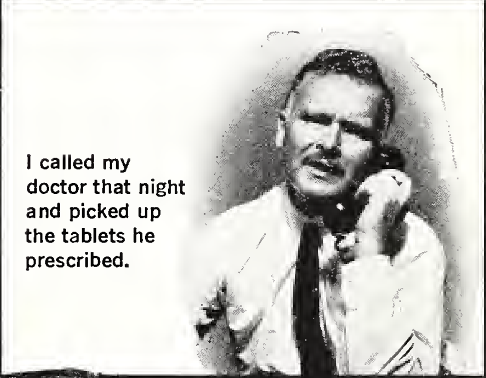
REACHING FOR THOSE 9B's NEARLY PUT ME ON THE SHELF...



Reaching for 9B shoes and other top shelf sizes is no joke . . . it gave me a terrible kink in my back.



Before the day was over, I could hardly stoop to push a shoehorn.



I called my doctor that night and picked up the tablets he prescribed.

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Salts of Dihydrohydroxycodeinone and Homatropine, plus APC

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ACTS FASTER — usually within 5-15 minutes. **LASTS LONGER** — usually 6 hours or more. **MORE THOROUGH RELIEF** — permits uninterrupted sleep through the night. **RARELY CONSTIPATES** — excellent for chronic or bedridden patients. **VERSATILE** — new "demi" strength permits dosage flexibility to meet each patient's specific needs. Percodan-Demi provides the Percodan formula with one-half the amount of salts of dihydrohydroxycodeinone and homatropine.

AVERAGE ADULT DOSE: 1 tablet every 6 hours. May be habit-forming. Federal law permits oral prescription.

Each Percodan* Tablet contains 4.50 mg. dihydrohydroxycodeinone hydrochloride, 0.38 mg. dihydrohydroxycodeinone terephthalate, 0.38 mg. homatropine terephthalate, 224 mg. acetylsalicylic acid, 160 mg. phenacetin, and 32 mg. caffeine.

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Councilor District News

FIRST COUNCILOR DISTRICT

DONALD M. DOWELL, CHILLICOTHE, COUNCILOR

Grand River Medical Society

The Grand River Medical Society met at the Strand Hotel on March 12, at 6:45 p.m. There were forty doctors and members of the Auxiliary present.

The members of the Auxiliary presented a fashion show prior to the dinner. Each model had designed and made her own costume. These were all of a highly humorous nature.

Mrs. Mildred Bohnsack accompanied a trio of ladies from Brookfield who presented some vocal numbers that were well received.

Dr. Richard Twyman, Kansas City, spoke on "Pediatric Surgical Problems." He used a large number of x-ray slides, photographs in color, and charts to illustrate a fine presentation.

Dr. E. W. Allen, President, reported on a letter from Blue Cross and Blue Shield on methods of providing hospital insurance for elderly patients. There was no discussion.

Dr. Dowell, Councilor, reported on the most recent Council meeting in St. Louis. Senate Bill 50 was discussed. The Keogh-Jenkins bill was also discussed. The Councilor also urged all delegates to attend the state meeting.

Meeting was adjourned at 10:10 p.m.

C. L. Clark, M.D., *Secretary Pro Tem*

SECOND COUNCILOR DISTRICT

B. L. MURPHY, HANNIBAL, COUNCILOR

Chariton-Macon-Monroe-Randolph County Medical Society

W. F. Francka, Hannibal, President of the Missouri State Medical Association, spoke at a dinner meeting of the Chariton-Macon-Monroe-Randolph County Medical Society at the Woodland Hospital in Moberly, Thursday night, March 12. He discussed a number of bills before the Missouri Legislature as well as our Federal Congress which definitely concerned the practice of medicine.

These included Senate Bill 50 in the Missouri Senate which would provide for single licensure of all doctors in medicine and doctors of osteopathy in Missouri; House Bill 232 would transfer the Division of Registration and Examination, including the Board of Medical Examiners, from the State Department of Education to the Department of Business and Administration; Senate Bill 24 seeks to broaden the practice rights of chiropractors; and another bill in the Missouri Legislature would provide additional welfare benefits for the purpose of providing hospital and nursing home bed-patient care for public assistance recipients.

He indicated that as far as the Legislature was concerned, the biggest problem facing medicine, and the people it cares for, is the Forand Bill, which is now House Resolution 4700, and which proposes to provide hospitalization and surgical services for anyone eligible for Social Security benefits. Dr. Francka was confident that our medical care problems can be solved through voluntary means without such drastic measures as the Forand Bill, which is another name for socialized medicine.

He pointed out the great strides that have been made in the coverage of people over 65 under Blue Cross-Blue Shield, and commercial insurance companies during the last seven years. In addition, he discussed important cooperative efforts that are now being made by the American Medical Association and other interested groups who are doing everything possible to promote voluntary health insurance coverage for this particular age group.

Members present were Drs. J. E. Campbell, Macon; F. A. Barnett and G. M. Ragsdale, Paris; P. V. Dreyer, Huntsville; F. L. Harms and G. W. Hawkins, Salisbury; G. C. Rice and D. D. Stuart, Brunswick; Eugene L. Arnold, Josephine Baker, C. C. Cohrs, J. Will Fleming, T. S. Fleming, Robert M. Hasson, L. E. Huber, C. C. Smith, S. R. Szymanski, and R. H. Young, Moberly; H. L. Green, Hannibal.

Josephine Baker, M.D., *Secretary*

Marion-Ralls-Shelby County Medical Society

A joint dinner meeting of the members of the Marion-Ralls-Shelby County Medical Society and the members of the corresponding dental societies was held at the Mark Twain Hotel in Hannibal, Tuesday night, March 17.

This special occasion began with a social hour followed by dinner and then an outstanding scientific presentation given by Louis T. Byars, M.D., of St. Louis, on "The Early Care of Facial Trauma." Dr. Byars is associate professor of clinical surgery at Washington University and is president of the American Society of Plastic and Reconstructive Surgery.

A good attendance of both doctors and dentists was present to enjoy and benefit from the entire evening schedule.

John H. Walterscheid, M.D., *Secretary*

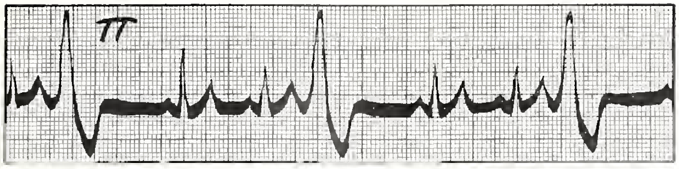
FOURTH COUNCILOR DISTRICT

JOSEPH C. CREECH, TROY, COUNCILOR

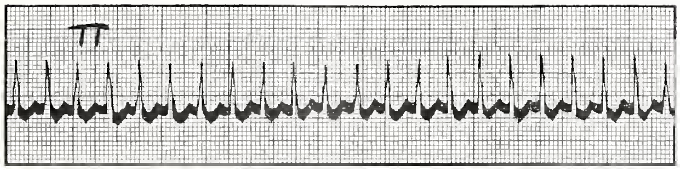
Jefferson County Medical Society

A meeting of the Jefferson County Medical Society was held Tuesday evening, March 24, at the Jefferson County Memorial Hospital.

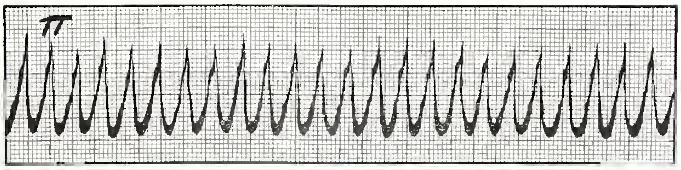
restore normal sinus rhythm



1. Premature ventricular contractions



2. Paroxysmal auricular tachycardia



3. Paroxysmal ventricular tachycardia

in arrhythmias

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SPECIFIC ANTIARRHYTHMIC EFFECT
Vistaril is effective in ventricular extrasystoles and paroxysmal tachycardias (both auricular and ventricular).
plus
PSYCHOTHERAPEUTIC POTENCY
proven calming action indicated for arrhythmia patients.
and
THE OUTSTANDING SAFETY
of Vistaril as compared to other antiarrhythmic drugs in general use has been noted by investigators.

THE FOLLOWING DOSAGE REGIMEN IS RECOMMENDED (individualized by the physician for maximum effectiveness):

PARENTERAL DOSAGE: 50-100 mg. (2-4 cc.) I.M. stat., and q. 4-6 h., p.r.n.; maintain with 25 mg. b.i.d. or t.i.d. In acute emergency, 50-75 mg. (2-3 cc.) I.V. stat.; maintain with 25-50 mg. (1-2 cc.) I.V. q. 4-6 h., p.r.n.

ORAL DOSAGE: Initially, 100 mg. daily in divided doses until arrhythmia disappears. For maintenance or prophylaxis, 50-75 mg. daily in divided doses.

SUPPLY: Vistaril Capsules, 25 mg., 50 mg. and 100 mg. Vistaril Parenteral Solution, 10 cc. vials and 2 cc. Steraject® Cartridges. Each cc. contains 25 mg. (as the hydrochloride).

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References: 1. Burrell, Z. I., et al.: Am. J. Cardiol., 1:624 (May) 1958. 2. Hutcheon, D. E., et al.: J. Pharmacol. & Exper. Therap., 118:451 (Dec.) 1956.

A film of Upjohns Grand Rounds No. 2, "The Cardiac Patient in Stress: Work, Surgery, Pregnancy," was shown. This was originally shown on closed circuit TV from Boston, with a panel consisting of doctors from Harvard and Tufts Medical Schools headed by Dr. Paul White.

John F. Rutledge, M.D., *Secretary*

Lincoln-St. Charles County Medical Society

A dinner meeting of the Lincoln-St. Charles County Medical Society was held on Tuesday night, March 31, at the Southern Air Restaurant in Wentzville.

The evening festivities began with a social hour followed by dinner and then the program. The scientific presentation of the evening was given by Dr. Russell Crider of St. Charles who discussed "Surgical Treatment of Peptic Ulcer Disease."

This was an interesting and practical discussion and stimulated a number of questions and general discussion by the audience.

Paul H. Rother, M.D., *Secretary*

FIFTH COUNCILOR DISTRICT

BYRON STUART, BOONVILLE, COUNCILOR

Audrain County Medical Society

A dinner meeting of the Audrain County Medical Society was held at the Country Club in Mexico, Missouri, on Tuesday night, March 17. A social hour preceded dinner.

The scientific program for the evening was presented by William H. Masters, M.D., associate professor of obstetrics and gynecology, at Washington University Medical School in St. Louis. Dr. Masters gave a most interesting discussion on the subject, "My Experiences in Teaching Hypnosis for Analgesia During Labor."

In addition, he discussed the subject of medical hypnosis as applied to the general field of medicine. He interestingly demonstrated the techniques of hypnosis on willing subjects during the meeting.

Dr. Masters spoke on and illustrated hypnosis.

Informal discussion followed the presentation.

Twenty physicians and guests were present to enjoy this unusually well received program.

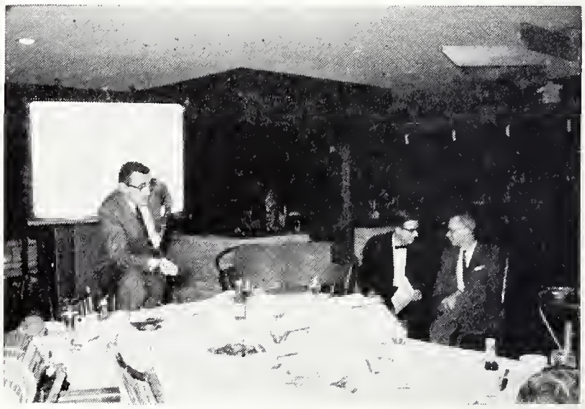
Ernest S. Gantt, Jr., M.D., *Secretary*

SIXTH COUNCILOR DISTRICT

C. G. STAUFFACHER, SEDALIA, COUNCILOR

Joint Medical Societies Meeting

Fifty-four physicians, their wives and guests attended a joint dinner meeting of the Henry, Johnson, Pettis, Saline, and adjacent County Medical Societies, at the Old Homestead in Sedalia on Wednesday night, March 18.

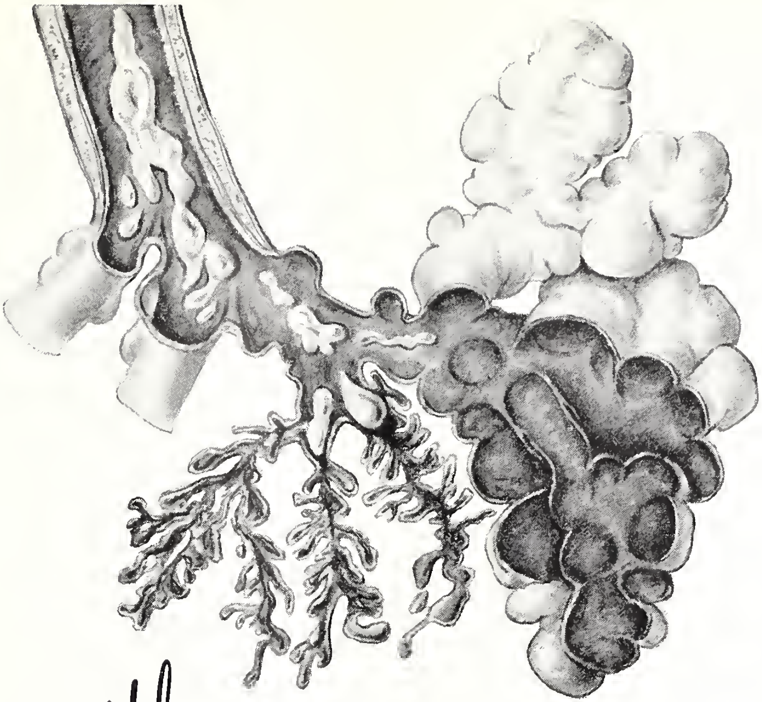


A panel discussed maternal mortality.

The evening festivities got under way with a social hour held at the home of Dr. and Mrs. C. G. Stauffacher and flowed from there to the Old Homestead for dinner and programs.

The ladies held a separate meeting after dinner where they were privileged to view an outstanding exhibition of free hand landscape drawing.

The doctors enjoyed a presentation on, "Maternal Mortality in Missouri," sponsored by the Maternal Welfare Committee of the Missouri State Medical Association in cooperation with the Missouri Academy of General Practice. Members of the panel were: James E. Keeler, M.D., Kenneth



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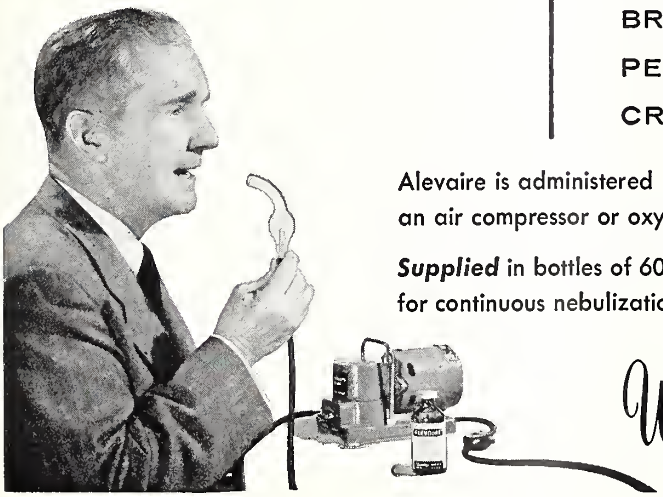

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The meeting was well attended.

Dr. Francka addressed the meeting.

Nicolay, M.D., and Joseph C. Williams, M.D., of Kansas City, Missouri.

They presented actual case reports and asked for audience comments and suggestions concerning what might better have been done in the management of these cases. The State Association Maternal Mortality Committee has been working on this problem for a number of years and has enjoyed the support, in these endeavors, of the Kansas City and St. Louis Gynecological Societies.

C. G. Stauffacher, M.D., *Councilor*

West Central Missouri Medical Society

The members of the West Central Missouri Medical Society and their wives were privileged to hear a talk by Hugh Stephenson, Jr., M.D., head of the Department of Surgery, University of Missouri Medical School, on Thursday evening, March 12, at a dinner meeting at the Inn Hotel in Butler.

Dr. Stephenson spoke on, "The Present Status of Cardiac Resuscitation." Dr. Stephenson has a recent publication of "Cardiac Arrest and Resuscitation," which was published in November, 1958, by the C. V. Mosby Company of St. Louis, Mo.

J. C. Moody, M.D., *Secretary*

EIGHTH COUNCILOR DISTRICT

W. W. TILLMAN, JR., SPRINGFIELD, COUNCILOR

Seventy physicians from Southwest Missouri attended a dinner meeting of the Eighth Councilor District of the Missouri State Medical Association in Joplin, on Tuesday night, March 10.

This gala affair took place in the Joplin Club at the Connor Hotel and presented a full evening's schedule. Festivities began at 6 p.m. with a social hour and a general get-together where old friendships were renewed and new ones made. An excellent smorgasbord dinner was served which was followed by the program proper.

Dr. Robert E. Kirschman, Joplin, president of the Jasper County Medical Society, opened the evening's program by welcoming everyone present on behalf of his society, serving as host. He conducted a short business session of the Jasper County Medical Society, and then introduced the Councilor of the Eighth District, Dr. Tillman, and invited him to take over the meeting.

Problems relating to the socio-economic aspects of medicine and organizational matters affecting the State Medical Association were concerns of the evening discussion. Dr. W. F. Francka, Hannibal, President of the State Medical Association, discussed the appointment and charge of the special committee set up by the 1958 House of Delegates, to study the present Councilor District set up of the State Medical Association and the representation of component societies in the House of Delegates. This committee will report its recommendations to the House during the 1959 Annual Meeting in Kansas City, April 5-8.

Mr. T. R. O'Brien, Executive Secretary of the State Association, discussed legislative bills now in the Missouri Legislature and in the Federal Congress which are of considerable importance to the medical profession. Free choice of physician and closed panel medicine as well as certain aspects of the corporate practice of medicine were discussed by Dr. Durward Hall, Springfield, a Delegate to the A.M.A. of the State Medical Association, and by Dr. W. W. Tillman, Springfield, Councilor.

The magnitude of these problems was quite

The meeting was held at the Joplin Club.

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evident from the short discussions that time permitted. It was pointed out that the delegates from the component societies, who will meet in Kansas City April 5-8, have some knotty problems to consider.

In closing the meeting the Councilor expressed the sincere gratitude of the entire Eighth Councilor District for the hospitality and excellent arrangements for the meeting by the Jasper County Medical Society. He also thanked the physicians from the West Central Medical Society, of the Ninth Councilor District, for their attendance.

W. W. Tillman, M.D., *Councilor*

NINTH COUNCILOR DISTRICT

J. H. SUMMERS, LEBANON, COUNCILOR

Mid-Missouri County Medical Society

William Gillespie, M.D., chest surgeon from St. Louis, presented a scientific program at the dinner meeting of the Mid-Missouri County Medical Society in Rolla, on Thursday night, March 26.

Dr. Gillespie spoke to the physicians and their wives on the subject. "Esophageal Hiatus Hernia."

M. K. Underwood, M.D., *Secretary*

TENTH COUNCILOR DISTRICT

BEN M. BULL, IRONTON, COUNCILOR

Mineral Area County Medical Society

The Mineral Area County Medical Society held its March meeting at the Clinic Building at State Hospital No. 4 in Farmington on Thursday night, March 26.

"Recent Advances in the Treatment of Hypertension" was discussed by a panel of three cardiac Fellows at St. Louis University Medical School and Dr. James Janney, Jr., Associate Professor of Medicine.

This was a most interesting discussion and brought out important points to be considered in the every day practice of medicine.

George K. Watkins, M.D., *Secretary*

THE DOCTOR AND HIS STATE MEDICAL ASSOCIATION

The following presentation was read at the dinner for student guests during the 52nd annual meeting of the Southern Medical Association meeting in New Orleans, La., in November 1958. Mr. Rowland B. Kennedy, Jackson, Miss., executive secretary of the Mississippi State Medical Association, made the presentation. The article appeared in the March issue of the *Southern Medical Journal* and is reprinted by permission.

"In 1954, James Bryan, a wise and able medical executive, wrote these two meaningful paragraphs:

" 'It is not to be denied that medical society membership is intrinsically valuable to a physician, and I consider such values extremely important. In fact, it would be impossible to imagine the existance of a medical profession without its members being associated with one another in a guild relationship.

" 'The medical society, like any other democratic institution, exists not for its own sake primarily but rather as an instrument through which its members are enabled to do certain things that they could not hope to do as individuals. . . .'

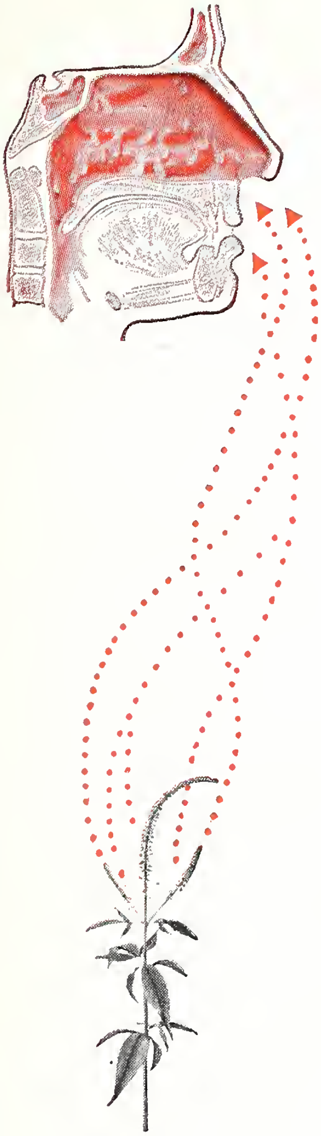
"The last sentence is the story of all state medical associations. These organizations serve only the purpose of doing for the doctor of medicine what he is individually unable to do for himself. Just how much the association does is up to individual physicians—ultimately to those who are medicine's next generation.

"The state organization is the keystone of the medical guild relationship. The fifty-three state and territorial associations are bound together in a confederation to form the American Medical Association. Their cooperative capabilities make possible A.M.A.'s scientific and socio-economic achievements. These same state organizations with their power of charter are the source of existence and authority for the county or component medical societies. For medical democracy to work, the state association must be a part of every physician's professional life.

"Each of the three basic parts of medical organization is unique and irreplaceable. The county society is the doctor's medical community. It is the scene of professional endeavor. The American Medical Association is the highest expression of broadly unified endeavor, sensitive to the will of the national majority, engaged for the most part in developing and implementing programs of general application. How, then, is the state medical association unique?

"For one thing, it is the provincial sovereign voice of physicians who are identified geographically from others among their American colleagues. The state association is concerned with laws regulating medical practice and the circumstances under which care is provided. It must formulate and carry out programs in this specific connection among which are licensure, nearly all third party systems of care, and the terms of relationship between physician and patient as well as among physicians themselves. No other organizational instrumentality or even an agency of government can possibly discharge these responsibilities.

"But the quasi-governmental functions of the state medical association are only a fraction of its service responsibility and opportunity to the profession and the public. For example, it is the most able and versatile medium for scientific communication and postgraduate education immediately available to most doctors. It offers the closest authoritative professional liaison with medical education and the local medical community.



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References: 1. Sheldon, J. M.: Postgrad. Med. **14**:465 (Dec.) 1953. 2. Hubbard, T. F. and Berger, A. J.: Annals Allergy p. 350 (May-June) 1950. 3. Kline, B. S.: J. Allergy **19**:19 (Jan.) 1948. 4. Goodman, L. S. and Gilman, A.: Pharmacol. Basis Ther., Macmillan, New York, 1956, p. 532. 5. Fabricant, N. D.: E.E.N.T. Monthly **37**:460 (July) 1958. 6. Lhotka, F. M.: Illinois M.J. **112**:259 (Dec.) 1957. 7. Farmer, D. F.: Clin. Med. **5**:1183 (Sept.) 1958.

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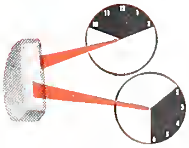

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"The state association must serve both its county societies and the American Medical Association. It must maintain committees to study existing and proposed national policies and relate their usefulness and desirability to state and local needs. It assists local groups in establishing patterns of care best suited to population distribution and occupational endeavor within the state. Its final thesis is in relating the parts to the whole while applying and interpreting these indispensable service aims.

"How can the state medical association fit into a physician's professional future?

"Wherever there is a health care need, the state medical association has a responsibility. Its opportunity for service is as great as the zeal, imagination, and vigor of its members. When a physician asks, 'What does the association do for me?' it's about the same as a patient you have seen through a critical heart episode saying, 'I guess I'd have made it just as well without you, doctor!'

"To the sort of physician who can seriously ask, "What does the association do for me?" the question is unanswerable. The mere fact that such a question ever occurs to him shows an alarming lack of professional perspective. Happily, few such doctors are found. To those who say, 'How can I contribute to the success of my association?' medicine's future is rightfully and wisely entrusted."

POSTGRADUATE COURSE IN GERIATRIC MEDICINE

The third annual Postgraduate Course in Geriatric Medicine will be held in the Medical School Auditorium of Washington University, St. Louis, on May 21, 22 and 23. The course will be conducted by Washington University School of Medicine with the support of the Gerontological Research Foundation. It is cosponsored by the St. Louis Medical Society, the St. Louis County Medical Society, the Missouri State Medical Association, the St. Louis Academy of General Practice, the Mental Health Association of St. Louis, the St. Louis City and County Unit and Missouri Division of the American Cancer Society and the Arthritis and Rheumatism Foundation. The course is approved for 14½ hours of Category I credit for members of the Academy of General Practice, and tuition is free.

PROGRAM

Thursday, May 21

8:00 a.m. Registration in lobby of Medical School Auditorium.
9:30 a.m. Welcome and Orientation, Kenneth C. Price, M.D., St. Louis.
9:40 a.m. Concepts in Geriatric Medicine, William B. Kountz, M.D.
10:00 a.m. The Integration of Medical and Social Planning for the Aged, Joseph Costello, M.D.
10:30 a.m. Intermission.
10:50 a.m. The Evaluation of Basilar Rales in the Aged, John R. Smith, M.D.
11:45 a.m. Evaluation of Murmurs in the Aged, Aldo A. Luisada, M.D., Chicago.
1:00 p.m. Lunch, Cafeteria, Barnes Hospital.
2:00 p.m. Panel on Cardiopulmonary Disease.
Determination of the Relative Importance of Cardiac and Pulmonary Factors, Bernard Bercu, M.D.
Incidence, Etiology, Therapy and Prognosis, Donald Finger, M.D.
Surgery in the Presence of Reduced Cardiopulmonary Reserve, John Shields, M.D.

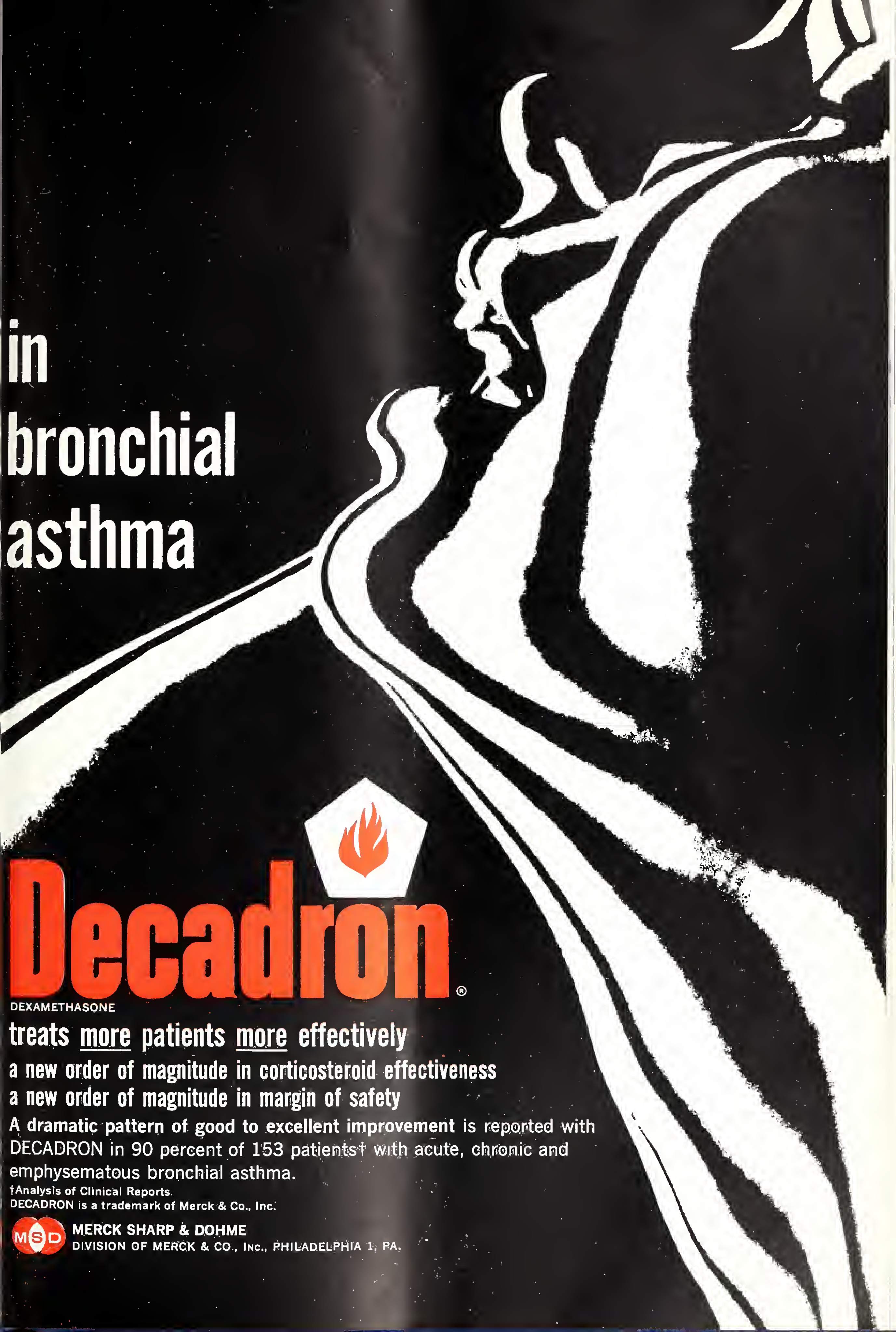
Friday, May 22

9:00 a.m. The Medical Approach to Psychological Health of Older People, Jaime Toro, M.D.
9:30 a.m. Intellectual and Performance Variations in the Aged, Robert W. Kleemeier, Ph.D.
10:30 a.m. Intermission.
10:45 a.m. Psychiatric Problems, James M. A. Weiss, M.D.
11:30 a.m. The Psychosocial Concepts of Retirement, Robert B. Deitchman, M.D.
12:00 noon. General Discussion
1:00 p.m. Lunch, Cafeteria, Barnes Hospital.
2:00 p.m. Was William Osler Correct in Thinking That Proteinuria in the Aged Is Benign?, Robert M. Kark, M.D., Chicago.
3:00 p.m. Panel on Hypertension.
What Constitutes Hypertension in the Aged?, Mitchell Perry, M.D.
Selection of Drug Therapy: Results and and Side Effects, Phillip Comens, M.D.
Evaluation of Renal Function and Treatment of Underlying Kidney Disease, James Nickel, M.D.
6:30 p.m. Reception and Banquet. Tiara Room, Park Plaza Hotel.
Medical Science and the Search for the Good Life, Warren Andrew, M.D., Indiana University.

Saturday, May 23

9:00 a.m. Factors Modifying the Response to Treatment With Fibrinolytic Agents, Nils U. Bang, M.D., New York.
10:00 a.m. Panel on Arterial Insufficiency.
Evaluation and Medical Mangement of the "Small Stroke Syndrome," Irwin Levy, M.D.
The Surgical Correction of Decreased Cerebral Blood Flow, Henry G. Schwartz, M.D.
Medical Evaluation and Therapy of Peripheral Vascular Disease, Melvin Goldman, M.D.
Surgical Measures in the Treatment of Obliterative Arterial Diseases of the Extremeties, James Stokes, M.D.
1:00 p.m. Lunch. Cafeteria, Barnes Hospital.
3:00 p.m. Tour of Grant's Farm.

Further information and application blanks may be obtained by addressing Kenneth C. Proce, M.D., Postgraduate Course, Geriatric Medicine, Washington University School of Medicine, 600 S. Kingshighway, St. Louis 10, Mo.



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Missouri Medicine in Review

Leo H. Pollock, M.D.

FORTY YEARS AGO

Dr. Francis L. Reder, St. Louis, read a paper before the Adams County Medical Society, Quincy, Ill., on Monday, April 14, entitled, "Vascular Tumors."

Dr. N. C. Acree, Myrtle, spent several weeks in a hospital at Springfield recently, due to a fractured femur. He is convalescing and has returned to his home.

Leo H. Pollock, M.D.

A physician is needed at Fifty-six, Ark., and we have been asked to let our members know of the need at that point.

In the *Journal of the American Medical Association*, April 5, we note the announcement of the death of Lieut. George W. Goins of Toole, Utah, who died at Jefferson Barracks, March 14. Before going to Utah several years ago, Dr. Goins resided at Breckenridge, Mo., and was for many years secretary of the Caldwell County Medical Society.

Maternity hospitals and homes for infants and children will be licensed and placed under the supervision of the State Board of Charities and Corrections if the bill passed by the house of representatives is enacted.

The "American Year Book" for 1918 just published, records Dr. M. G. Seelig of St. Louis, professor of surgery, St. Louis University Medical School, who wrote the article on Surgery.

TWENTY-FIVE YEARS AGO

The third annual meeting of the Harvey Cushing Society convened in St. Louis April 5 and 6. The society is composed of North American physicians and surgeons specializing in diseases and lesions of the brain. Dr. John Fulton, New Haven, Connecticut, professor of physiology at Yale University and president of the society, spoke at the annual dinner.

Dr. Claude J. Hunt, Kansas City, will deliver an address on "Intrathoracic Goiter" at the meeting of the American Association for the Study of Goiter in Cleveland, June 7.

Col. George A. Skinner, Omaha, Surgeon of the Seventh Corps Area, United States Army, who has been conducting an inactive duty training period for officers of the medical department of the Reserve Corps at St. Louis University, was honored with a dinner at Hotel Melbourne, St. Louis, April 19.

Mr. E. Mead Johnson, president of the Mead Johnson Company, Evansville, Indiana, died of a heart attack on March 20. He helped found the Seabury Johnson surgical supply concern in Poughkeepsie, New York, and a little later with a cousin organized the firm of Johnson and Johnson, now nationally prominent in the manufacture of drugs and surgical dressings.

The Jasper County Medical Society met in conjunction with the Sebastian County (Arkansas) Medical Society at Fort Smith, Arkansas, March 13. Thirteen members of the Jasper County Medical Society were present. The scientific program was preceded by a delightful dinner.

TEN YEARS AGO

The Ninety-first Annual Session closed March 30, 1949, with Wallis Smith, M.D., Springfield, officially installed as President of the Association. Officers elected by the House of Delegates and the Council are: President-Elect, W. A. Bloom, M.D., Fayette; Vice Presidents, J. C. Creech, M.D., Troy; E. J. McIntire, M.D., Carthage, and H. M. Henrickson, M.D., Poplar Bluff; Treasurer, C. E. Hyndman, M.D., St. Louis; Secretary, H. E. Petersen, M.D., St. Joseph; Editor, R. O. Muether, M.D., St. Louis.

Robert E. Schlueter, M.D., St. Louis, was presented with the 1949 award of merit of the St. Louis Medical Society at a meeting in Dr. Schlueter's honor on April 5. Chauncey D. Leake, M.D., Galveston, spoke on "Books Make the Doctor" and R. Emmet Kane, M.D., St. Louis, spoke on "Surgeon-Scholar-Friend."

Lawrence T. Post, M.D., St. Louis, received the Leslie Dana Gold Medal for 1948, a national award given annually for outstanding achievement in the prevention of blindness, at a dinner in St. Louis on March 25.

A Graham Asher, M.D., Kansas City, was elected president of the Missouri Heart Association at a meeting in Kansas City on March 27.

J. Albert Key, M.D., St. Louis, was elected vice president of the Johns Hopkins Medical and Surgical Association in Baltimore on February 26.

Herbert J. Rinkel, M.D., Kansas City, addressed the American College of Allergists in Chicago on "Using Skin Tests With Serial Dilution as a Guide in the Treatment of Hay Fever and Asthma."

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From the Medical Schools

UNIVERSITY OF MISSOURI

Meetings

On February 16, a group of staff members of the legal department of the M.F.A. Insurance Company was conducted on a tour of the Medical Center by Mr. David Phillippe, hospital administrative assistant.

On February 20, the premedical group from Central College, Fayette, toured the University of Missouri Medical Center. Dr. Frank B. Engley, Jr., Assistant Dean, and Dr. Dallas K. Meyer, chairman of the admissions committee of the School of Medicine, conducted the group on this tour.

The annual meeting of the Missouri Society of Anesthesiologists was held on March 15 at the University of Missouri Medical Center convening at 10:30 a.m. The program committee for the meeting consisted of Dr. Roger W. Bumgarner, Dr. Kenneth K. Keown, and Dr. Philip Hitchcock, chairman. Guest speakers for the meeting included Dr. Robert W. Virtue, professor of anesthesiology at the University of Colorado Medical Center, and Dr. LeRoy W. Krumpermann, professor of anesthesiology at Temple University Medical School. Also appearing on the program were Dr. Joseph E. Flynn, professor and Chairman of Pathology of the University of Missouri Medical Center, Dr. Russell D. Shelden and Dr. Oral B. Crawford, clinical associates in anesthesiology, University of Missouri Medical Center. Others attending from the University of Missouri Medical Center were Dr. Kenneth K. Keown, professor of anesthesiology, and Dr. Philip Hitchcock, assistant professor of anesthesiology.

Second Group of Preceptors Appointed

The second group of fourth year medical students were assigned to the following physicians in the State of Missouri for the period of March 2 through April 14, 1959. The physicians were suggested by the Committee on Medical Education and Hospitals of the Missouri State Medical Association: Dr. Robert Ward, Centralia; Dr. Alvan Karaker, Farmington; Dr. Harold Holscher, Warrenton, and Dr. T. M. Macdonnell, Marshfield.

Trips and Talks

Dr. Roscoe L. Pullen, Dean of the School of Medicine, attended the Alpha Epsilon Delta Fraternity premedical banquet held at Central College, Fayette, on March 12. This banquet is an annual affair and also invited were the President, Vice-President, and Dean of Central College and members of the Howard County Medical Society. Dr. Pullen spoke to those present on the subject of "Problems of Medical Education."

Dr. Jack M. Martt, assistant professor of medicine and director of the Cardio-Pulmonary Laboratory, has received word that he has been certified by the American Board of Cardiovascular Disease. Twenty-four examinees including Dr. Martt took the examination, which is one of the prerequisites to being certified in this subspecialty, on January 16, 1959, under the direction of Emory University School of Medicine at Atlanta, Georgia. Dr. Martt spoke before the American College of Physicians regional meeting on February 21, at Kansas City, on "Differentiation of Atrial Septal Defects."

Dr. Thomas W. Burns, associate professor of medicine, also spoke to the group on this date on the subject of "Thyroid Disease in Missouri." Dr. Burns appeared before the Diabetes Lay Society of Greater Kansas City on March 10, at the University of Kansas Medical Center and spoke to the group on the subject of "Diet and Drugs in the Treatment of Diabetes Mellitus." He also was on a panel with two other doctors from the Kansas City area.

Dr. Frank B. Engley, Jr., professor and Chairman of the Department of Microbiology, spoke on the subject of "Public Health Aspects of Water and Sewage" at a meeting sponsored by the Division of Health of Missouri, College of Engineering, Department of Civil Engineering, and Division of Continuing Education. This meeting was held at the Student Union, University of Missouri. On February 27, Dr. Engley, Mr. Allan W. Purdy, director of aids and awards for the University of Missouri, Mrs. Mercedes D. Smith, Instructor in Nursing, and Mr. Donald Pratt, Executive Secretary of the Missouri Tuberculosis Association, attended a meeting of a volunteer committee held in Jefferson City for discussion on scholarships and loans for students in health careers.

Dr. J. S. Roden, associate professor and Chairman of the Department of Obstetrics and Gynecology, and Dr. Joseph E. Flynn, professor and Chairman of the Department of Pathology, attended the meeting of the Callaway County Medical Society held in Fulton, on February 19, and participated in a discussion on "Clinical Application of Exfoliative Vaginal Cytology." Dr. Flynn has recently been appointed to the Test Committee of the National Board of Medical Examiners. He will serve a four-year term.

Dr. C. S. Anast, assistant professor of pediatrics, and Dr. Hugh E. Stephenson, Jr., professor and Chairman of the Department of Surgery, participated in a program of the Fayette Parent-Teachers' Association on March 3, at Fayette. Dr. Anast was a member of a panel discussing "Rheumatic Fever and Congenital Heart Disease in Children," and Dr. Stephenson spoke on "Open Heart Surgery"

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On March 9, Dr. Clement E. Brooke, assistant professor of pediatrics, Dr. Anast, and Dr. Paul Zee, research assistant, attended a meeting of the University of Kansas Medical Center on "Masculinization of the Female Fetus Due to the Use of Certain Oral Progestins During Pregnancy." Dr. Brooke spoke informally at this meeting.

On March 11, Dr. Gerard J. VanLeeuwen, assistant instructor, attended the Pediatric Postgraduate Meeting at the University of Kansas Medical Center.

Dr. J. E. Randall, associate professor of physiology, attended a meeting of the Sigma Xi on March 10, and spoke to the group on "Statistical Analysis of Physiological Time Series."

Guests

Recent guests visiting the Department of Surgery at the University of Missouri Medical Center were Dr. Raymond O. Frederick and Dr. Tom Fischer, St. Louis, who on February 18, conducted grand rounds.

On March 4, Dr. George B. Rader, St. Louis, was a guest of the Department of Surgery and conducted surgical grand rounds.

Dr. Hugh E. Stephenson, Jr., professor and Chairman of the Department of Surgery, attended the meeting of the Central Surgical Association held in Montreal, Canada on February 19, 20, and 21, 1959. On February 23, 1959, Dr. Stephenson was appointed to an ad hoc committee of the American Medical Association to study operating room death data.

Dr. Stephenson, Dr. William H. Wade, assistant professor of surgery, Dr. William A. Dwyer, Dr. W. R. Loney, Dr. Earl Wipfler, Dr. Edwin Johnson, and Dr. John Gaskill, residents in surgery, along with Dr. Horace E. Thomas and Dr. John Modlin, clinical associates, attended the sectional meeting of the American College of Surgeons held in St. Louis, March 9 to 12. On March 12, Dr. Stephenson addressed the West Central Missouri Medical Society on "The Present Status of Cardiac Resuscitation" at Butler.

Dr. Samuel P. W. Black, associate professor of neurosurgery, attended the biennial meeting of the Johns Hopkins Medical and Surgical Association held in Baltimore, Maryland and during this period of February 24 to 28 also did some research work and observed sterotactic surgery in New York and New Haven.

New Appointments

Dr. Jose Sala was appointed clinical associate in radiology effective February 15, 1959. Dr. Sala was chief of radiotherapy at the Ellis Fischel State Cancer Hospital, Columbia.

Dr. Freddie Lee Hayes has been appointed Assistant Instructor and First Year Resident in General Practice effective July 1, 1959. Dr. Hayes received his M.D. in 1958 from the University of Missouri and is presently interning at Sacramento County Hospital, San Francisco, California.

WASHINGTON UNIVERSITY

Awards

Dr. Bruce Breckenridge, research instructor in pharmacology at Washington University School of Medicine, has been named one of 25 Markle Foundation Scholars in Medical Science for 1959-1964. Dr. Breckenridge, who received his B.S. Degree from Iowa State College, Ames, in 1947; his M.S. degree in 1949; his Ph.D. in 1952 and his M.D. in 1956, all from the University of Rochester, has been on the Washington University Medical School Staff since 1956, when he served his interneship at Barnes Hospital. Since 1957, he has been postdoctoral fellow and instructor in pharmacology, where he is doing research in the field of neurochemistry, specifically, investigations of a new biochemical pathway for the synthesis of glycogen in brain. Dr. Breckenridge received the Borden Undergraduate Research Award in 1956 and was elected to Sigma Xi and Alpha Omega Alpha, honorary science and medical fraternities, during his undergraduate years. He, his wife and three children live at 1608 Thrush Terrace, Brentwood. The scholarship awarded Dr. Breckenridge is the fifth received by staff members of Washington University Medical School since the initiation of the program in 1948.

A City of Hope Gallery of Achievement medallion was given to Dr. Leo Loeb in a ceremony at his home, 40 Crestwood Drive, Clayton. He is professor emeritus of pathology at Washington University. The medal was in recognition of Dr. Loeb's "contribution to scientific knowledge and the welfare of humanity." Dr. E. V. Cowdry, research professor of anatomy and director of the Wernse Laboratory for Cancer Research at the university made the presentation. Dr. Loeb is 89 years old. He joined the university staff 43 years ago and became professor of pathology and head of the department in 1924, holding that position until his retirement in 1937. He has received many awards for his contributions to medicine, and an annual lectureship was established in his name by Phi Beta Pi medical fraternity at the university.

Round-the-World-Trip

Dr. Edmund V. Cowdry, who is directing the Wernse Cancer Research Laboratory at Washington University School of Medicine, is on a four month's trip around the world under sponsorship of the China Medical Board. His wife is traveling with him. The trip includes stopovers in the Hawaiian Islands, Japan, Formosa, the Philippine Islands, Siam, India, Turkey and England. Dr. Cowdry will visit laboratories where

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medical work is being sponsored by the China Medical Board and will talk with deans of Medical Schools. In March, he spoke on "Anatomy of the Past, Present and Future," during a session of the Japanese Association of Anatomists in Tokyo. While in Tokyo, Dr. Cowdry also lectured on "Cytological Features of Malignancy" at the March meeting of the Japanese Pathological Society, and in April on "Aging of Cells," at the General Assembly of the Japanese Medical Congress. Dr. Cowdry will be a visitor at Chiba University, Chiba, Japan, where he will speak on "Cigarette Smoking and Precancerous Lesions of the Lung" and "The Geographic Pathology of Cancer." Three more lectures will be given at the Taiwan National University, Taipeh, Taiwan.

He has been named Hamdi Suat Aknar Lecturer for 1959 by the Turkish Association for Cancer Research and will deliver this lecture on June 15 in Ankara. He will also spend several days at the Bangkok Medical Center, which was affiliated with Washington University from 1951 to 1954. Dr. and Mrs. Cowdry will leave Turkey for London on June 16, returning to St. Louis on June 20. Their first trip around the world was in 1951 and 1952, when Dr. Cowdry was state department advisor in cancer to the government of India.

Telecast

Four patients with forms of chest disease presenting diagnostic problems were examined by a panel of chest physicians and surgeons in a live closed-circuit telecast originating from Washington University-Barnes Hospital Medical Center in March. Medical leaders from Washington University were Dr. Lauren V. Ackerman, professor of surgical pathology; Dr. Thomas H. Burford, professor of surgery; and Dr. Alfred Goldman, associate professor of clinical medicine and director of medical chest service. The eighth in the series of Upjohn Grand Rounds programs was transmitted from David P. Wohl, Jr., Memorial Hospital Auditorium, 4960 Audubon, to closed-circuit outlets in St. Louis, Atlanta, Bethesda, Boston, Chicago, Cleveland, Kalamazoo, New York, Philadelphia, Syracuse and Washington D. C. Cases discussed included patients who presented an undiagnosed mediastinal mass, hemoptysis, pneumonitis and pleural effusion. In addition to the four patients who were presented to the panel, a report, dealing with the current status of pulmonary cytology, originated from the Memorial Hospital for Cancer and Allied Diseases, New York, and was given by Dr. Leopold Koss, director of the Cytology Laboratory and associate professor of pathology, Sloan-Kettering Division, Cornell University Medical College. Among clinical panel members who were in St. Louis for the telecast was Dr. J. G. Scadding, dean and director of studies of the Institute of Diseases of the Chest, Brompton Hospital, London, who has achieved particular recognition in the United States for his contributions to the subject of sarciodosis. Other members were Dr. L. Henry Garland, clinical professor of radiology, Stanford University School of Medicine, San Francisco; Dr. Averille A. Liebow, John Slade Ely professor of pathology, Yale University School of Medicine, New Haven, Conn.; Dr. Richard H. Overholt, clinical professor of surgery, Tufts University School of Medicine, Boston; and Dr. Leo G. Rigler, visiting professor of radiology, University of California School of Medicine, Los Angeles.

Lectures

Sir Francis Walshe, London, internationally recognized as one of England's most distinguished neurologists, delivered the fourth annual George H. Bishop Lecture in experimental neurology April 10, in David P. Wohl, Jr. Memorial Hospital Auditorium, 4960 Audubon Avenue. Professor emeritus of the Professorial Medical Unit, University College Hospital and of the National Hospital for Nervous Diseases, both in London, Sir Francis discussed "The Critical Use of the Literature in the Study of Medicine and Its Ancillary Sciences." He was in the United States through the joint efforts of Washington University School of Medicine, the University of Cincinnati and the University of California, Berkeley. Sir Francis, who was appointed visiting Professor of Neurology at Washington University for the week of April 6, holds both doctor of medicine and doctor of science degrees from the University of London. Author of the neurology textbook, "Diseases of the Nervous System," which is used by many medical schools in the United States, he is past editor of the journal *Brain;* past president of the Royal Society of Medicine and of the Association of British Neurologists. The George H. Bishop Lecture was established in 1956 by the Neurology Division of Washington University School of Medicine in honor of Dr. Bishop, professor emeritus and lecturer in neurophysiology, who has been associated with the school since 1921. In 1932, he established the laboratory of neurophysiology in the Oscar Johnson Institute in the Medical Center. Basic research conducted by Dr. Bishop was important in the development of clinical electroencephalography. This has proved a valuable tool in the diagnosis of brain disorders, particularly epilepsy.

Dr. Sol Sherry, professor of medicine at Washington University School of Medicine, presented the twenty-second annual Roger Morris lecture in March at the University of Cincinnati College of Medicine. He spoke on "Experiences With Fibrinolytic Therapy for Thromboembolic Disease." From 1951 to 1954, Dr. Sherry was assistant professor of medicine at University of Cincinnati, assistant attending physician at General Hospital, and director of the May Institute for Medical Research.

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[1] Dennison, A.D., Jr.: Am. J. Cardiol. 400-403 (March) 1958.

AC-259 M

SAINT LOUIS UNIVERSITY

Space Medicine Development

Dr. Alfred W. Richardson, associate professor of physiology at Saint Louis University, has invented a pocket sized radar and microwave detector, which is currently being used by members of the Armed Forces as a safeguard against radiation. Dr. Richardson recently presented the device called a Richardson dosimeter before a conference attended by other space project consultants at Cape Canaveral, Fla. He was assigned to the space project in January. The Richardson dosimeter, weighing but one ounce, was designed to slip into a standard shirt pocket. Dr. Richardson serves as consultant on the biologic effects of heat producing microwaves for the three branches of the Armed Forces. His research interests at the University are centered about the physiological and biophysical aspects of space medicine.

Meetings

A number of the Saint Louis University medical faculty participated in the sectional meeting of the American College of Surgeons which met in St. Louis March 9 to 12 at Kiel Auditorium. Special seminars were sponsored by Saint Louis University medical faculty at university hospitals in conjunction with the meeting.

Presiding over sessions at Kiel Auditorium were: Dr. E. Lee Dorsett, assistant professor of obstetrics and gynecology and chief, department of obstetrics and gynecology, St. Louis County hospital; Dr. C. Rollins Hanlon, professor of surgery and director, department of surgery and Governor, American College of Surgeons; Dr. Grayson Carroll, associate professor of clinical urology, and Dr. Robert D. Mattis, associate professor of clinical ophthalmology and executive secretary, department of ophthalmology.

Saint Louis University medical faculty sponsored nonoperative clinics at three of the university affiliated hospitals. Dr. Charles J. Galbraith, senior instructor in surgery and chief of the Saint Louis University Surgical Service at V.A. Hospital, presided over a program at Veterans Hospital. Dr. Leo V. Mulligan, associate professor of clinical surgery, presented a paper on "The Surgical Treatment of Portal Hypertension. 75 Cases." Dr. Francis X. Paletta, assistant professor of clinical surgery, delivered a paper on "Management of the Burned Hand."

At Firmin Desloge Hospital, Dr. John E. Byrne, instructor in urology, presided over a Urology Seminar titled "Urologic Viewpoint in Hypertension." Participants and their subjects were: Dr. Robert E. Mack, assistant professor of internal medicine, "Medical Aspects of the Hypertensive State (Renal and Prerenal)"; Dr. Joseph J. Naryka, instructor in urology; Dr. Robert V. Brennan, instructor in urology, "Unilateral Renal Lesions Capable of Producing Hypertension," and Dr. Eugene Tucker, assistant professor of pathology, "Correlation of the Pathological Changes in the Various Hypertensive States."

Other nonoperative clinics at Desloge Hospital was one presiding over by Dr. Joseph A. Hardy, director of the department of gynecology and obstetrics. Participants and their subjects included: Dr. William H. Vogt, Jr., associate professor of clinical gynecology and obstetrics; Dr. Hubert A. Ritter, instructor in gynecology and obstetrics and Dr. Ralph Schwarz, resident, "Fetal Salvage in the Saint Louis University Hospitals"; Dr. Vogt, Dr. Daniel Duron, resident, Dr. John McGee, resident, "RISA (Radioactive Iodinated Serum Albumen) Studies With Relation to Blood Volume Changes and Location of Placental Implantation"; Dr. Hardy, Dr. Ritter and Dr. Thomas M. Mier, assistant professor of clinical gynecology and obstetrics, "Experience With the Scintillation Counter in Regulation Radiation Dosage in Cervix Cancer." Dr. Hardy, Dr. Vogt, Dr. Ritter, Dr. George E. Gantner, senior instructor in pathology, Dr. Roy V. Boedecker, assistant professor of clinical gynecology and obstetrics, and Dr. Vincent L. Eberle, instructor in gynecology and obstetrics, "Clinical Pathological Conference on Obstetrical Bleeding."

A general surgery clinic presented at Desloge Hospital was presided over by Dr. J. Eugene Lewis, associate professor of clinical surgery. Speakers and their topics included: Dr. Willard Bartlett, assistant professor of clinical surgery, "Prophylaxis and Treatment of Malignant Exophthalmos"; Dr. Gene B. Starkloff, assistant professor of clinical surgery, "Management of Diverticulitis of the Colon"; Dr. Robert Kistner, senior instructor in internal medicine, "Tracheostomy in General Surgical Practice"; Dr. Joseph L. Lucido, assistant professor of clinical surgery, "Emergency Management of Chest Trauma"; Dr. Charles R. Doyle, "Problems in Varicose Veins" and Dr. Vallee L. Willman, "Surgical Management of Peripheral Vascular Emergencies."

At Cardinal Glennon Memorial Hospital for Children, Dr. Vallee L. Willman, senior instructor in surgery, presented a paper on "Current Status of Cardiovascular Surgery." A symposium on congenital heart diseases followed which was moderated by Dr. Hanlon. Participants and their subjects included: Dr. Mary Davis, instructor in pediatrics, "Detection and Clinical Evaluation of Congenital Heart Lesions"; Dr. J. Gerard Mudd, director, Cardiovascular Laboratory, "Cardiac Catheterization and Cinefluoroscopy"; Dr. Willman, "Preoperative Preparation for Open-Heart Surgery"; Dr. John F. Schweiss, instructor in surgery and anesthesiologist at Glennon Hospital, "Anesthesia in Cardiac Surgery"; Miss Sue Cleary, R.N., technical assistant, cardiovascular laboratory, "Postoperative Care of the Surgical Patient" and

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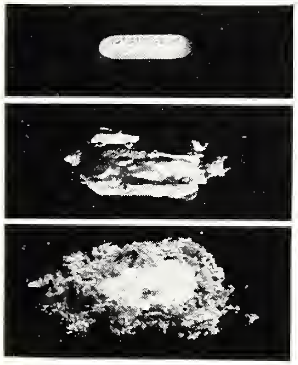

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References: 1. Hart, D.; Bagnall, A. W.; Bunim, J. J., and Polley, F. H.: Ninth International Congress on Rheumatic Diseases, Toronto, Ont. (June 25) 1957. 2. Report of Joint Committee, Medical Research Council & Nuffield Foundation, Treatment of Rheumatoid Arthritis, British Medical Journal (April 13) 1957. 3. Friend, D. G.: New England J. Med. 257:278 (Aug.) 1957.

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Rev. J. B. Winter, Chaplain, Cardinal Glennon Hospital, "Social Aspects of Cardiac Surgery."

Lectures

Dr. Thomas G. Baffes, thoracic surgeon at Children's Memorial Hospital in Chicago, delivered the eleventh Alphonse M. Schwitalla lecture sponsored by Alpha Omega Alpha medical fraternity and attended their initiation banquet. Medical faculty initiated were: Dr. John P. Wyatt, professor of pathology, and Dr. Herbert C. Sweet, associate professor of internal medicine.

Dr. Alexander B. Gutman, professor of medicine at Columbia University College of Physicians and Surgeons, delivered the annual John Auer lecture sponsored by Phi Beta Pi medical fraternity. Dr. Gutman who is director of medicine at Mt. Sinai Hospital and consultant in research at Bronx Veterans Administration Hospital discussed gout.

Dr. Rene Wegria, director of the department of internal medicine, and Dr. Elizah Adams, director of the department of pharamacology at Saint Louis University were guest speakers before the University's Medical Faculty Seminar March 19.

Dr. Don C. Weir, associate professor of clinical radiology, was guest lecturer at the Postgraduate Seminar on Radiology and Radioisotopes at the University of Kansas School of Medicine. He lectured on "Roentgen Aspects of Diagnosis of Injury to the Cervical Spine" and "Roentgen Evaluation of the Acute Abdomen."

Dr. Joseph Hardy, director of the department of gynecology and obstetrics, delivered a paper on "Recent Advances in Gynecology" before a meeting of the Kansas Obstetrical Society held in Wichita, Kansas, March 25.

Dr. Kazuo K. Kimura, chief of experimental medicine and neuropharmacology branch, St. Louis Chemical Research Division and Directorate of Medical Research, Chemical Warfare Laboratories at Army Chemical Center, Maryland, will deliver a special Sigma Xi lecture at the Saint Louis University School of Medicine May 3 at 5:00 p.m. in Lecture Room B. His subject will be "Fear Gas and Rescue Breathing." New members of the Sigma Xi honorary scientific society from Saint Louis University will be initiated following the lecture. Dr. Kimura is a graduate of the Saint Louis University School of Medicine.

Elections

Dr. Charles Cherre, instructor in radiology, Saint Louis University, has been elected vice president of the Greater St. Louis Society of Radiologists.

Dr. Don C. Weir, associate professor clinical radiology, St. Louis University, has been elected to a three year term as councilor of the American College of Radiology.

Woman's Auxiliary

(Continued from page 507)

Convention when the awards will be presented.

The Point System will be used again this coming year, with special credit being given, we hope, for services rendered by the auxiliaries or their individual members to the public. We hope that more and more the Medical Auxiliary will be looked to as a sort of "reference library" when organizations need speakers, films or pamphlets on subjects in which we are also interested. Such a wealth of material is available to us, it seems a shame not to share it. It should be the goal of each member this year to spread the word, in her bridge club conversation, at her P.T.A., at her church Mother's Club, any place she goes where women talk about their home problems and club problems—and that means everywhere—that she, individually, or the auxiliary as a group, can and will aid in presenting a program, or will themselves present a program on Mental Health, Civil Defense, Safety, Recruitment, or Health Education. That is what we will mean by Community Service—which will be the priority project this coming year. Community Service is the Act—good Public Relations is the Result!

TUBERCULOSIS ABSTRACT

Chronic Pulmonary Diseases in Patients With Lung Cancer

Pulmonary pathology, such as pneumonia, atelectasis, or tuberculosis, often masks the presence of a lung cancer and creates diagnostic difficulties. The question arises whether such pathologic changes are secondary complications, are merely coexistent, or have preceded the carcinoma. The prevalent view is that usually lung cancer develops in a previously healthy organ, and that in general nonmalignant pathology is due to the new growth or is coincidental.

However, judging from case histories as well as roentgenologic and pathologic findings, chronic lung processes antedate a cancer in many cases. This suggests that an intimate relationship between nonmalignant and malignant pulmonary pathology may exist in the lungs.

Clinical investigations on a possible link between common nonoccupational lung diseases and pulmonary cancer have been few and inconclusive. Still, in some series of patients with lung cancer previous chest ailments were prevalent, and follow-up statistics indicate an increased risk of respiratory cancer in persons with chonic bronchitis. It is commonly reported that many patients with lung cancer have had a long history of chronic cough. Whether this symptom is considered in-

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Issued by the National Tuberculosis Association.
Walter Finke, M.D., *New York State Journal of Medicine*, December 1, 1958.

significant, or is labeled "smoker's cough," is usually signalizes some respiratory disorder.

These considerations gave rise to the clinicoroentgenologic study reported here, which attempted to determine retrospectively the amount of important pre-existing respiratory sickness in a group of patients with lung cancer.

METHODS OF INVESTIGATION

The basic material for this investigation was the records of 100 unselected patients with proved primary lung cancer of any histologic type who had been admitted to The Genesee Hospital during the past 15 years. The routine histories proved to be inadequate so records of previous admissions were reviewed. Additional information was sought from the patients, their families, physicians, and institutions which had knowledge of the case. Only acute respiratory illnesses which had occurred at least ten years prior to the diagnosis of lung cancer were included in the final analysis. Similarly, only chronic pulmonary disorders that had existed at least ten years were considered significant.

A reasonaby accurate picture of the previous respiratory status could be reconstructed for 86 of the 100 patients. In addition to this clinical information, a roentgenologic history of 63 of the 86 patients was obtained.

CHRONIC RESPIRATORY DISEASE

Over 90 per cent of the 86 patients whose previous respiratory health could be reinvestigated had had a chronic cough for at least ten years and in most cases for twenty years. As a rule, the cough was productive or, if "dry," associated with dyspnea or "asthma."

FREQUENCY OF CHRONIC PULMONARY DISEASE OF TEN YEARS' DURATION OR MORE IN 86 PATIENTS WITH LUNG CANCER

Chronic Respiratory Disease	*Number of Cases*	
Chronic bronchitis (moderate or very severe)		56
with chronic asthma	27	
observed for tuberculosis	29	
Chronic pulmonary tuberculosis		6
Silicosis or sequela to gas poisoning in World War I		3
Total		65

Most of these patients had required frequent medical care for years. Many had been disabled repeatedly, and some had become pulmonary cripples long before the malignant disease supervened. Thus, the illness that proved to be lung cancer often seemed at first an aggravation of an old chest ailment rather than a new and different disease.

ACUTE RESPIRATORY ILLNESSES

A history of frequent respiratory episodes was found in over 80 per cent of the investigated patients with lung cancer. Forty per cent had suffered an almost fatal respiratory sickness in childhood, severe pleurisy, or major chest injuries with pulmonary complications. The most frequent of these illnesses was influenza or pneumonia during the epidemic of 1918-1920 and pneumonia at some other time in the patient's earlier life.

For tentative comparison 86 individuals hospitalized between 1955 and 1957 for various nonmalignant surgical and medical conditions were selected to match the study group as closely as possible in age distribution. They were questioned thoroughly about chronic pulmonary diseases of at least ten years' duration, influenza in 1918-20, and pneumonia at some other time at least ten years prior to their admission. Fully developed bronchitis, which had existed in 65 per cent of the group with lung cancer, was found in 30 per cent of the controls. Similar differences were found also with regard to suspected or proved tuberculosis. Among the patients with pulmonary malignancy the number of those who had influenza in 1918-20 was twice that among the controls. Multiple episodes of severe pulmonary illness has occurred in 50 per cent of the patients with cancer but in only 19 per cent of the control group.

Current research on the cause of lung cancer concentrates on extrinsic carcinogens in cigarette smoke and air pollution. These studies tend to overshadow others which support anew the older view that tuberculosis and other lung diseases may predispose to pulmonary malignancy. Early cancer in the walls of old bronchiectases, near tuberculous and other scars and in areas of chronic inflammation is being reported frequently. The findings of a multicentric origin of lung cancer and cancer in situ beside an invasive tumor indicate that generalized pulmonary inflammation can pave the way for bronchogenic carcinoma. These investigations add weight to the concept of a profound cell injury as a cause of the malignant transformation. Severe lung insults of any type merely initiate or further those pathologic changes which produce continuous tissue unrest and disorganized proliferation. The neoplasm may not arise where macroscopically the lung had seemed most damaged. Various factors have been suspected as causes for the present "pandemic of lung cancer." The theory which points toward the pandemic of 1918-1920, may well explain why lung cancer rose sharply following the epidemic and why in recent years a substantial increase is noticeable only in the older age group.

In other organs chronic inflammation is widely recognized as potentially malignant. It is, then conceivable that similar pathologic processes have some part in the genesis of malignant diseased lungs also.

Missouri Medical Meetings

Missouri State Medical Association, St. Louis, March 13, 14, 15, 16, 1960.

American Medical Association, Atlantic City, June 8-12, 1959.

Mississippi Valley Medical Society, St. Louis, Sept. 30-Oct. 1, 1959.

Kansas City Southwest Clinical Society, Kansas City, Oct. 5-8, 1959.

Missouri Academy of General Practice, 10th Annual Assembly, Chase Hotel, St. Louis, Nov. 7-8, 1959.

St. Louis Pediatric Society—second Thursday of each month, September through May at Medart's Restaurant, 8:00 p.m.

Component Society Meeting Dates

Audrain County Medical Society—third Monday of each month.

Barton-Dade County Medical Society—third Wednesday of each month.

Benton County Medical Society—meets only on call.

Boone County Medical Society—first Tuesday of each month.

Buchanan County Medical Society—first Wednesday of each month.

Butler-Ripley-Wayne County Medical Society—first Wednesday of each month.

Callaway County Medical Society—third Thursday of each month.

Cape Girardeau County Medical Society—first Monday of each month.

Chariton-Macon-Monroe-Randolph County Medical Society—second Thursday of each month September through May.

Clay County Medical Society—last Tuesday of each month.

Clinton County Medical Society—meets only on call.

Cole County Medical Society—fourth Tuesday of each month.

Cooper County Medical Society—first Monday after the 15th of each month.

Dallas-Hickory-Polk County Medical Society—first Wednesday of each month.

Dunklin County Medical Society—third Tuesday of each month.

Franklin-Gasconade-Warren County Medical Society—last Tuesday of each month at the St. Francis Hospital, Washington, at 12:30 p.m.

Grand River Medical Society (Caldwell-Carroll-Livingston, Grundy-Daviess, Harrison, Linn, Mercer, DeKalb)—second Thursday of each month.

Greene County Medical Society—fourth Friday of each month.

Henry County Medical Society—meets only on call.

Holt County Medical Society—meets only on call.

Howard County Medical Society—meets only on call.

Jackson County Medical Society—March, May, October and December.

Jasper County Medical Society—second Tuesday of each month, September through May.

Jefferson County Medical Society—meets third Friday of each month.

Johnson County Medical Society—meets only on call.

Lafayette-Ray County Medical Society—second Tuesday of each month at 7:30 p.m., at the Victory Cafe, Lexington.

Lewis-Clark-Scotland County Medical Society—meets only on call.

Lincoln-St. Charles County Medical Society—third Thursday of each month.

Marion-Ralls-Shelby County Medical Society—fourth Tuesday of each month. 7:30 p.m.

Mid-Missouri County Medical Society (Phelps-Crawford-Dent-Pulaski-Maries-Laclede)—fourth Thursday of each month.

Miller County Medical Society—meets only on call.

Mineral Area County Medical Society (St. Francois-Iron-Madison-Washington-Reynolds-Ste. Genevieve)—fourth Thursday of each month.

Moniteau County Medical Society—second Thursday of each month.

Nodaway-Atchison-Gentry-Worth County Medical Society—first Monday in February, April, October and December.

North Central Counties Medical Society (Adair-Schuyler-Knox-Sullivan-Putnam)—meets only on call.

Ozarks Medical Society (Barry-Lawrence-Stone-Christian-Taney-Newton-McDonald)—second Tuesday of each month September through June.

Pemiscot County Medical Society—third Thursday of each month.

Perry County Medical Society—second Thursday of each month.

Pettis County Medical Society—third Monday each month September through May.

Pike County Medical Society—third Tuesday of each month.

Platte County Medical Society—meets only on call.

St. Louis County Medical Society—second and fourth Wednesday of each month.

St. Louis Medical Society—third Tuesday of each month October through May.

Semo County Medical Society (Stoddard, New Madrid, Mississippi, Scott)—third Wednesday of each month September through May.

South Central Counties Medical Society (Howell-Oregon-Texas-Wright-Douglas-Ozark)—fourth Wednesday of each month.

Webster County Medical Society—meets only on call.

West Central Missouri Society (Bates-Cass-St. Clair-Vernon-Cedar)—second Thursday of each month.

Book Reviews

Breast Cancer. The Second Biennial Louisiana Cancer Conference. New Orleans, January 22-23, 1958. Edited by Albert Segaloff, M.D., Director of Endocrine Research, Alton Oscsner Medical Foundation; Associate Professor of Clinical Medicine, Tulane University School of Medicine. The C. V. Mosby Company, St. Louis, 1958. Price $5.00.

Thirty persons contributed to this conference and represented the thinking and attitudes of researchers in epidemiology, preventive medicine, biochemistry, endocrinology, surgery, internal medicine, pathology, radiology and even psychiatry.

The major portion of the discussion covers the treatment of far advanced cancer of the breast and leaves the reader with the feeling that treatment of the disease cannot be grouped into any one didactic pattern. There is still great divergence of opinion as to the sequence of therapies and their effectiveness in the individual case. At least it lets the reader feel that he is not alone in his confusion as to the best procedure at times, for the individual patient.

In spite of improved and enlarged surgical technics, ablation therapy, radiation therapy, chemo and hormonal therapy, it is evident there remains much to be discovered about the disease. Even in the face of the tremendous campaign of the Cancer Society to educate the public to earlier recognition and treatment of cancer of the breast the over-all standardized mortality rate for can-

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cer of the breast per 100,000 population was 21.6 in 1930, and 21.5 in 1955!

One will find the book interesting reading, and it may help to crystallize methods of therapy in any one case. R.R.C.

Therapeutic Exercise for Body Alignment and Function, by Marian Williams, Ph.D., Assistant Professor of Physical Therapy, Department of Allied Medical Sciences, School of Medicine, Stanford University; and Catherine Worthingham, Ph.D., Director of Professional Education, The National Foundation for Infantile Paralysis, Inc. Exercise Illustrations by Harold Black. W. B. Saunders Company, Philadelphia. 1957. Price $3.50.

This is a practical manual of therapeutic exercise concisely written and so well illustrated that students, physicians and technicians should be able to put this material into effective use. Basic principles of treatment are carefully explained and both the rationale and procedure of exercise are illustrated by text and diagram. D.R.E.

Modern Perinatal Care, by Leslie V. Dill, M.D., Associate Clinical Professor, Obstetrics and Gynecology, Georgetown University School of Medicine; Consultant, Obstetrics and Gynecology, Army Medical School and Walter Reed General Hospital; Staff Member, Obstetrics and Gynecology, Providence Hospital, Washington, D. C. Appleton-Century-Crofts, Inc., New York, 1957. Price $6.50.

"Perinatal Care" is defined by the author to include attention designed for every woman from the time of conception to the weeks and even months following delivery. This book crystallizes the present day thought on the care of the woman, antepartum and postpartum. It presents neat outlines for therapy of medical conditions, given as an aid to those practitioners for whom consultation is not readily available. These methods are carefully outlined by the author. They may not be optimal in all instances but they are selected because of their simplicity and safety when extensive facilities are lacking.

The writer considerately and sanely treats abortion, pelvic menstruation, toxemia, anemias of pregnancy, fourth stage of labor and the complications to pregnancy arising from such conditions as heart disease and thyroid disorders. Attention is given to nutrition in pregnancy and to the psychologic aspects of pregnancy. Various problems relative to the infant are also considered: fetal mortality, birth injuries and infant feeding.

The obligations and regulations imposed upon the obstetrician by the law are reviewed.

An attempt is made to clarify the position of the Catholic Church on various obstetric problems. The author, while not of that particular faith, has done a masterful job. The chapter on the ethics of the Catholic Church, pertaining to obstetrics, is worth the price of the book. He eliminates many false concepts held by most Protestants, many Catholics, and innumerable physicians regardless of religious beliefs.

The work is considerate, economically done. Not a few highly trained men, on reviewing this effort, will be surprised to note that some of their prized procedures are considered a little archaic. The book is reasonably priced, well edited, with numerous references at the end of each chapter. It is recommended for the purpose stated by the author. A.B.S.

Introduction to Anesthesia, The Principles of Safe Practice, by Robert D. Dripps, M.D., Professor and Chairman, Department of Anesthesiology, Schools of Medicine, University of Pennsylvania; Anesthetist, Hospital of the University of Pennsylvania, Philadelphia; and James E. Eckenhoff, M.D., Professor of Anesthesiology, Schools of Medicine, University of Pennsylvania; Anesthetist, Hospital of the University of Pennsylvania, Philadelphia; and Leroy D. Vandam, M.D., Clinical Professor of Anesthesia, Harvard Medical School; Director of Anesthesia, Peter Bent Brigham Hospital, Boston. Line drawings by Leroy D. Vandam, M.D. W. B. Saunders Company, Philadelphia. 1957. Price $4.75.

This small volume is primarily designed as a teaching manual for students and residents. It deals entirely with the problems of general anesthesia, block technics being specifically excluded. The book is divided into five sections. The first four deal respectively with the preanesthetic period, the day of anesthesia, the actual operative procedure and the postoperative period. The fifth section is a catch-all devoted to special topics.

The book is essentially a distillate of the anesthetic experiences of the authors. Such a treatise is of great value, not only to beginners, but to advanced students of the specialty as well. This one is uncommonly well presented. Of particular merit are the discussions of anesthetic complications. The chronologic arrangement of the material, from the preanesthetic evaluation to the postoperative appraisal of the patient, is precise and orderly and makes for greater readability.

This is not a reference work. Its small size necessitates the rapid dismissal of relatively unimportant subjects. Documentation is brief, with only occasional reference to specific sources.

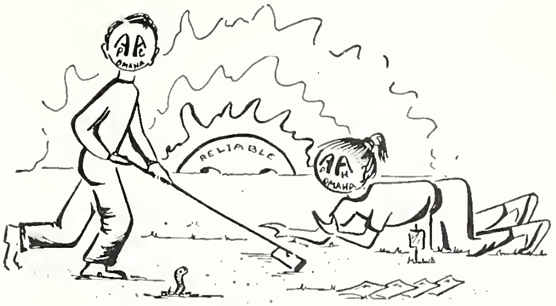
As a reliable guide to the safe and proper management of general anesthesia this book is sincerely recommended. H.S.M.

BOOK REVIEW

Diseases of the External Ear, by Ben H. Senturia, M.D., Associate Professor of Clinical Otolaryngology, Washington University School of Medicine; Director of Department of Otolaryngology, Jewish Hospital; With the Assistance of Carl F. Gessert, Ph.D.; Morris D. Marcus, M.D.; Benard C. Adler, M.D.; Fritz M. Liebman, M.D.; Lawrence H. Sophian, M. D.; Charles D. Carr, M.T.; Elizabeth S. Baumann, A.B.; Verna M. Alford, A.B.; Dorothy L. Baldwin, B.S., and Nancy Hellman, A.B. Charles C Thomas, Springfield, Ill., 1957. Price $8.50.

This is a quite complete treatise emphasizing scientific investigation and clarification of the diseases of the external ear. It leaves no ramifications of this subject uncovered, either by discussion in the text or by the prodigious bibliographies listed.

It is a book primarily for the specialist, be he otologist or dermatologist. The section on therapy is, of course, the most appealing to the clinician, and is complete in every detail. In fact, the entire treatise complements Dr. Senturia's excellent work of many years, and resurrects diseases of the external ear from their previous unhappy status to their present status of clinical response. W.P.B.



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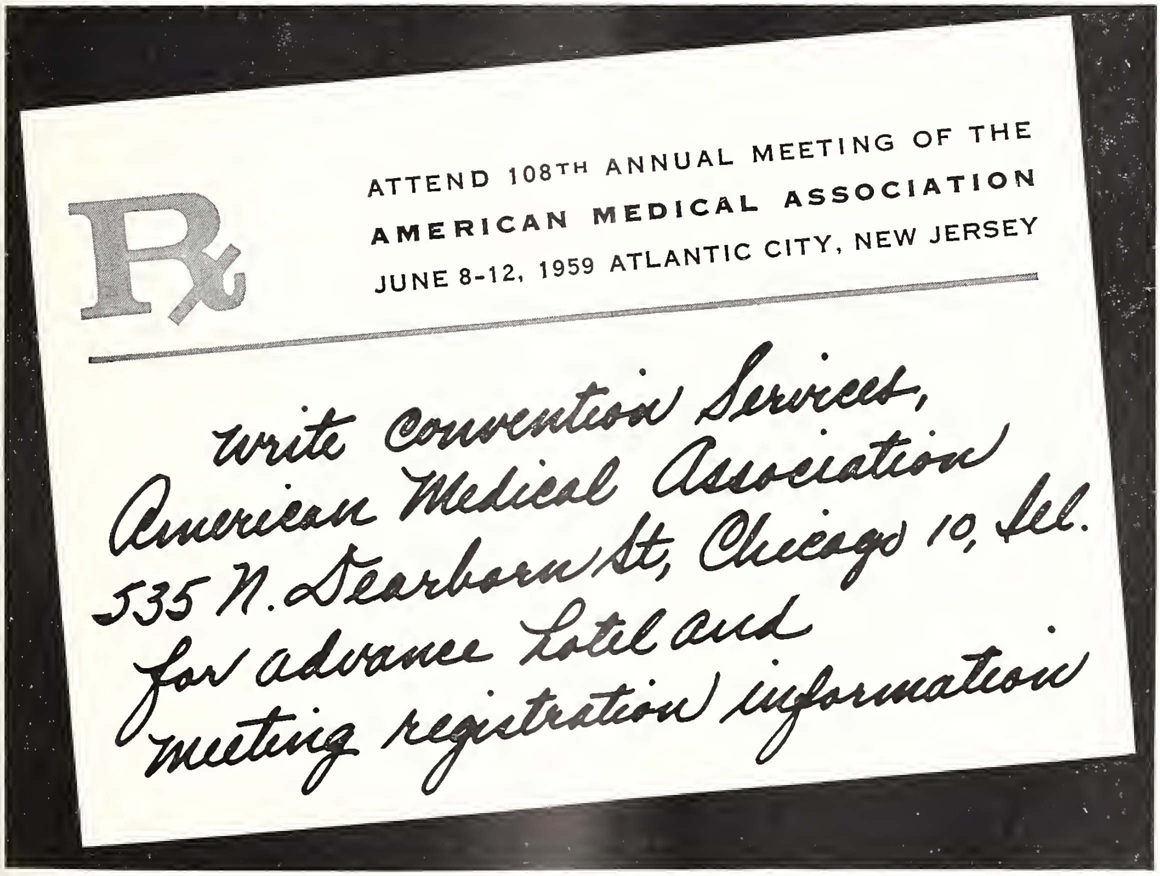
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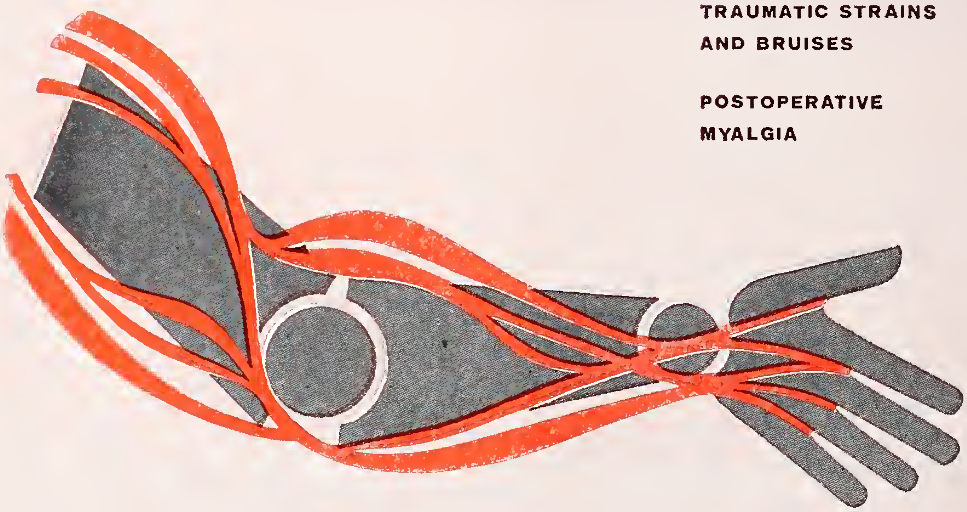

BOOK REVIEW

Correlative Neuroanatomy and Functional Neurology, by Joseph G. Chusid, M.D., Attending Neurologist, St. Vincent's Hospital, New York; and Joseph J. McDonald, M.D., Dean of Medical Faculty, American University of Beirut, Beirut, Lebanon; formerly Professor of Surgery, Columbia University, New York. Ninth Edition. Illustrated by Ralph Sweet. Lange Medical Publications, Los Altos, California. 1958. Price $4.50.

This new edition is well written and serves as a fine supplement to many of the neurologic entities that are described. Each of its sections is practically a monograph. The first deals with the central nervous system and includes chapters on embryology, neurochemistry, brain and spinal cord. Section two deals with the peripheral nerves with each of the main nerves described in general, with diagnostic aids, syndromes, diseases and treatment. Section three deals with principles of Neurodiagnosis which includes various types of tests and diseases and disorders pertaining to the central nervous system.

The book is excellently illustrated and the authors are to be commended for the superior quality of these illustrations. One section stands out as to the illustrations of muscular testing and innervation by the various nerves. It is an excellent handbook for practitioners, residents and graduate physicians. S.D.F.

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BOOK REVIEWS

Textbook of Medical Treatment, by various authors. Edited by D. M. Dunlop, M.D., Professor of Therapeutics and Clinical Medicine, University of Edinburgh; Physician, Royal Infirmary, Edinburgh; and Sir Stanley Davidson, M.D., Physician, H. M. The Queen of Scotland; Professor of Medicine and Clinical Medicine, University of Edinburgh; Physician, Royal Infirmary, Edinburgh; formerly Regius Professor of Medicine, University of Aberdeen; and S. Alstead, M.D., Regius Professor of Materia Medica and Therapeutics, Glasgow University. Seventh Edition. E. & S. Livingstone Ltd., Edinburgh and London. 1958. Price $11.00.

This is a well written textbook covering all aspects of general medicine accentuating and emphasizing therapeutics. The book is written in a well organized manner giving much factual information in a concise manner. The general manner is to preface each major section with brief but interesting and informative introductory remarks covering the general background of the subject to be discussed which then follows in well organized detail.

Besides the chapters dealing with diseases and treatment, there are short, but well written, sections on such important basic topics as anticoagulant therapy, cortisone and corticotrophin, dehydration-electrolyte deficiencies, chemotherapy, the care of old people, and technical procedures (such as parenteral administration in fluids, blood transfusions, thoracentesis, paracentesis, aspiration of joints, oxygen therapy).

In summary, this is a valuable textbook to the practitioner in general medicine. T.S.H.

Practical Use of the Office Laboratory and X-Ray Including the Electrocardiograph, by Paul Williamson, M.D. The C. V. Mosby Company, St. Louis, 1957. Price $10.75.

Although this is a brief text the reviewer has chosen to limit his discussion to the Office Laboratory section only, while the section on X-Ray has been delegated to a fellow colleague in Radiology.

Part I—The Office Laboratory.

This small volume might more aptly be entitled "the place of the office laboratory in the interpretation of disease." Within its 323 pages, divided into two sections and thirty chapters, one finds many valuable hints on the interpretation of laboratory tests as adopted for office use. Perhaps the most valuable information contained is that dealing with the preparation of the patient prior to the tests described.

In the author's own words, the interpretations given are often purposefully oversimplified but in most instances serve to illustrate the meaning of the test under discussion. It is quite obvious and again so stated that the book is pointed directly at the general practitioner. I wish I could share Dr. Williamson's optimism with regard to the ease with which the requisite experience may be obtained to successfully direct and correctly interpret the many procedures discussed. The author exhibits an unusual interest and ability in this regard which could not have been obtained except through long experience and diligent application of his time.

This is not a cookbook of laboratory technic, and though some of the most necessary technics are detailed, the majority are not.

Occasionally the author climbs on his editorial soapbox and gives his colleagues a dose of well chosen advice about the misuse of the laboratory, as in the comment: "one of the most useless things in medicine is the attempt to follow the course of a minor anemia by repeated red blood cell counts." His examples are often spiced with a salty chuckle or two, sometimes at his own expense, all of which lend to readability. W.R.M.

Orr's Operations of General Surgery, by George A. Higgins, M.D., Associate Professor of Surgery, University of Kansas School of Medicine; Lecturer in General Surgery and Surgical Technic, University of Kansas City School of Dentistry; Chief of Surgical Service, Veterans Administration Hospital, Kansas City, Missouri; and Thomas G. Orr, Jr., M.D., Associate in Surgery, University of Kansas School of Medicine; Surgeon, Veterans Administration Hospital, Kansas City, Missouri. Third Edition, with 1990 Step-by-Step Illustrations on 835 figures. W. B. Saunders Company, Philadelphia. 1958. Price $20.00.

This volume is extremely well illustrated and concerns itself with the simple as well as some of the most technical aspects of surgery. There is a brief discussion of follow-up treatment in some sections, but this is necessarily slight in view of the vast number of subjects covered. As a general reference to surgical technic this book has few equals. D.C.P.

Modern Clinical Psychiatry, by Arthur P. Noyes, M.D., Superintendent, Norristown State Hospital, Norristown, Pennsylvania; and Lawrence C. Kolb, M.D., Professor and Executive Officer, Department of Psychiatry, College of Physicians and Surgeons, Columbia University; Director, New York State Psychiatric Institute. Fifth Edition. The W. B. Saunders Company, Philadelphia. 1958. Price $8.00.

Dr. Noyes and Dr. Colb have written a rather comprehensive textbook which covers most of the details of clinical psychiatry. It covers much of the background history of this field of medicine. It is not recommended for light reading because of its textbook nature and because of the large amount of detail into which the authors go. K.B.G.

Curiosa et Trivia

William B. McCunniff

George Gershwin's "neurotic" headaches became so severe that in February, 1937, during a performance of "Concerto in F" with the Los Angeles Philharmonic, he momentarily lost consciousness. The following April he had a similar episode, and after both, he reported smelling burning rubber. In June, physical examination and x-rays failed to reveal significant abnormalities; he refused to have lumbar puncture. A few hours post-op, on July 11, after he died, diagnosis was spongioblastoma multiforme of the right temporal lobe.

Our professional brothers, pharmacists, are the only retailers of whom the law demands a college education.

It has been shown that more men than women are able to achieve weight loss. Male success becomes more apparent with greater weight loss.

Our three-foot yard measure was decreed by Henry I of England. It was the distance from the tip of his nose to the tip of his thumb with the arm abducted 90 degrees. Only men wearing thirty-four inch sleeves need apply as standards.

Capsule Clinics

- All tumors of the submaxillary salivary gland should be considered malignant until proved otherwise. Garcelon, G. G., Arch Surg. **78**:12, 1959.
- Surgical procedures do not cause sufficient elevation of SGO-T and SLD to mask the characteristic curve exhibited by major myocardial infarction which may complicate the operative or postoperative course of the patient. Weisberg & Sampson, Am. Heart J. **57**:240, 1959.
- Elevated serum vitamin B-12 levels observed in patients with liver disease is probably due to release of the vitamin from the liver as the result of cellular disturbances. Stevenson & Beard, New England J. M. **260**:206, 1959.
- Electroconvulsive therapy is unsatisfactory for relief of intractable pain. In 10 patients treated in this manner, pain either was not altered or returned shortly after termination of treatment. Weinstein, E. A., et al. Arch Neurol. & Psychiat. **81**:37, 1959.

From Clinical Clippings, the Francis Roberts Agency, Inc.

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WASHINGTON

STUDY OF DOCTOR SHORTAGE

Medical schools are scheduled to come under close scrutiny during the next year if a bill introduced in the House of Representatives on April 15 is passed by the Congress. It is H.R. 6417 which would establish a commission to study the shortage of doctors of medicine in the United States. The commission would be directed to give special attention to:

1. The policy of medical schools in limiting the number of student admissions.
2. The number of physicians graduated annually from medical schools in the United States.
3. The extent to which hospitals must seek foreign doctors to fill internships.
4. The number of United States citizens studying medicine in foreign countries who could not gain admittance to medical schools in the United States.
5. The extent to which graduates of foreign medical schools are permitted to practice medicine in the United States.

The commission, which would be authorized to make a one year study, would be composed of two Senators, two members of the House of Representatives, two representatives from the executive branch of the government and six members from private life. The medical profession would have representation in the last group. The bill is in the House Interstate and Foreign Commerce Committee.

CARE FOR DISEASES OF THE AGED

In a talk before the Cambria County (Pennsylvania) Medical Society early in April, Congressman Thomas B. Curtis, 2nd District, Missouri, commended the outstanding progress which the medical profession has made in care for diseases of the aged and expressed commendation of the fact that an increasing number of citizens are providing for their medical health needs through private insurance programs. Mr. Curtis said "However, a problem remains in finding an answer to rising medical costs in the face of declining income which is the usual economic pattern for retired citizens." He stressed the view that the mere existence of an acknowledged problem does not of itself imply the necessity of federal action. He said that before any permanent action could properly be taken, it is necessary that thorough and authoritative medical-health surveys be completed.

CONGRESSIONAL RECORD

The *Congressional Record* recently carried a letter from Leonard W. Larson, M.D., chairman of the Board of Trustees of the American Medical Association, in which he set forth the activities of the A.M.A. and various state medical associations in improving the health care of the aged.

MEDICAL CARE INSURANCE FOR FEDERAL EMPLOYEES

The A.M.A. did not testify on S. 94, the bill to provide medical care for federal employees, but filed a statement. The statement includes the attitude of the Council on Medical Service and the Council on Legislative Activities and suggests: (1) permit a realistic choice of plan on the part of the individual employee; (2) permit all qualified carriers to offer coverage; (3) require financial participation by the employee in the payment of premiums under any plans selected; (4) provide for a minimum of governmental regulatory authority over participating carriers or plans, and (5) provide for adequate pre-funding for persons who retire after July 1, 1959, and a method by which the person who retired before that date can participate on a contributory basis.

The Senate subcommittee studying this bill which would cover approximately 4½ million government employees and their dependents, was increased from three to five members. Hearings by the committee ended in late April. Insurance carriers, labor unions, voluntary prepaid plans and various organizations appeared before the committee. However, sufficient objections have been raised against the bill that it is predicted that it will not pass this session of the Congress.

MEDICAL CARE EXPENSES

The Department of Labor gave the price index for medical care as 148.8 in March. The composite index remained at 123.7. The medical care index has increased each month during the last five years.

MEDICARE

Controversy over medicare billings might lead to a Congressional investigation, it is indicated. Recently a military publication quoted Brig. Gen. Floyd L. Wergeland, head of the program, indicating that there was a growing number of cases of physicians making additional charges to patients, despite the arrangement that physicians accept government compensation as payment in full.

NEW ASSIGNMENTS

Roy T. Lester, M.D., thoracic surgeon and medical director of the Texas Blue Cross-Blue Shield plans, has been appointed head of the A.M.A. Washington office.

Maj. Gen. Leonard D. Heaton, has been nominated by President Eisenhower to be the next Surgeon General of the U. S. Army.

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Many Bills Pending

T. R. O'Brien

As this issue goes to press, many important bills are still pending. The legislature is required by the Constitution to adjourn on May 31. Therefore, this report will not be too complete. A bulletin will be sent to all members as soon as possible after June 1.

Senate Bill 50, the joint licensure act to license doctors of medicine and osteopathy, passed the Senate by a vote of 30 to 0 and was referred to the House Committee on Public Health and Safety. A hearing was scheduled to be held on May 12, at which President Ralph Perry was to present the views of the Association.

House Bill 1, vendor legislation, is pending in the Senate Committee on Public Health. Passage of this act depends on the financial ability of the state to appropriate the necessary matching funds in order to receive the federal funds.

At the time this article went to press, all tax increase bills involving new taxes on cigarettes, liquor, beer, gasoline and the so-called use tax, had not passed the Assembly. Appropriation bills, as a result were reduced by the Senate approximately 33 million dollars in order to conform with state expected revenues.

IN THE LEGISLATURE

If some or all of these tax increase bills are not passed, House Bill 1 probably will fail to pass as the necessary state funds to implement the program will not be available.

Senate Bill 24, providing for changes in the chiropractic statutes, passed the Senate by a vote of 21 to 8. The bill was referred to the House Committee on Judiciary. A hearing was not scheduled at the time of this report.

House Bill 63, which appropriates money for the State Division of Mental Diseases and the state mental hospitals, was amended in the Senate to restore the House appropriation cut in the funds for the newly established Division of Mental Diseases.

A resolution adopted by the Missouri State Medical Association House of Delegates recommended this change. It is hoped that the necessary funds will be retained in this act.

Senate Bill 368, relating to the State Crippled Children's Service, was pending in the Senate Committee on Public Health. A hearing was scheduled to be held on Tuesday, May 5.

Objections of the Association, principally dealing with the advisory committee and the right of the "Service" to collect from those partially able to pay, were worked out in consultation and with the cooperation of President Ellis of the University of Missouri. An amendment to the act, which was agreed to by President Ellis, reads as follows: "Any such child who, or whose parents, guardian, or other person legally chargeable with the support of the child, is able to pay a portion but not all of the expenses for the required services for the child, shall be entitled to the services if the child, parents, guardian or other person legally charged with the support of the child shall pay such amounts thereof *to the hospital and physician* as the child, parents, guardian or other persons legally charged with the support of the child is reasonably able to pay." Another change in the bill would place the following in lieu of a former section. "Section 13. The administrator shall appoint a general advisory committee, the majority of which shall be doctors of medicine, and residents of the State of Missouri, to counsel and advise it in the administration of this chapter and particularly with reference to the adoption and administration of a plan or plans as provided in Sections 6 and 8 hereof."

House Bill 370, in the form of a committee substitute, was passed by the House and recommended "Do Pass" by the Senate Committee on Criminal Jurisprudence. The act is an attempt to control the misuse of barbiturate and amphetamine drugs. The thanks of the Association are due to the author of the bill, Evelyn G. Stone, representative from St. Louis, a nurse, and Drs. Luke B. Knese and J. J. Wimp, state representatives from the City of St. Louis and Adair County, who are members of MSMA who worked hard to have the bill modified in order to remove objections of the medical profession.

House Bill 396, in the form of a committee substitute, dealing with the office of coroner, was perfected in the House on April 29.

Drs. Charles B. Wheeler and A. Gelperin appeared at the committee hearing to express the views of the Association relative to this act. Dr. Wheeler urged the committee to consider the passage of legislation similar to the laws of Maryland, Virginia, Massachusetts and other states in which a state medical examiner system is in effect. Such legislation assures that qualified pathologists would be in charge of the ancient office of coroner.

House Bill 232, relating to the formation of a department of business and administration, in which all licensing boards would be placed, was withdrawn by the authors. A resolution creating an interim study committee is to present a report to the 1961 General Assembly.

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1. Editorial: New England J. Med. 258:48, 1958.
2. Vinnicombe, J.: Antibiotic Med. & Clin. Ther. 5:474, 1958.
3. Sheth, U. K., et al.: Ibid., p. 604, 1958.

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1 Schlesinger, E. B.: Tr. New York Acad. Sc. 2:6, (Nov.) 1948.
2 Richards, R. K., and Taylor, J. D.: Anesthesiology 17:414, 1956.
3 Shideman, F. E.: Postgrad. Med. 24:207, 1958.
4 Berger, F.: Pharmacol. Rev. 1:243, 1949.

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Across Missouri

With the addition of ten new markers in 1958, Missouri now has 90 of the large, two-sided, blue and gold markers for historic sites in 84 counties and the City of St. Louis. The marker program began in 1951 after a resolution by the Missouri Historical Society was acted upon by the 66th General Assembly providing for the project. The sites marked in 1958 were in Cedar County, Chillicothe, Christian County, DeKalb County, Osage County, Poplar Bluff, Unionville, Texas County, Webster County and West Plains. Selected for markers in 1959 are sites in Cass, Clinton, Cooper, Harrison, Lawrence, McDonald, Mercer, Mississippi, Polk, Scotland and Wayne Counties.

In early April the University of Missouri Press published its first book, thus joining the approximately 40 universities that have their own presses. Also the University of Missouri has established a bureau of business and economic research in the business and public administration school. The purposes are outlined: "It will initiate and undertake specific research projects in business and economic problems selected for their theoretical or practical significance; encourage and facilitate research by individual faculty members by assisting them in developing their projects and furnishing technical assistants; publish and distribute results of studies that are of usefulness to academic and business communities of Missouri; cooperate with state and private agencies in conduct of research programs that are of state-wide or industry-wide interest, and assist in training of graduate students."

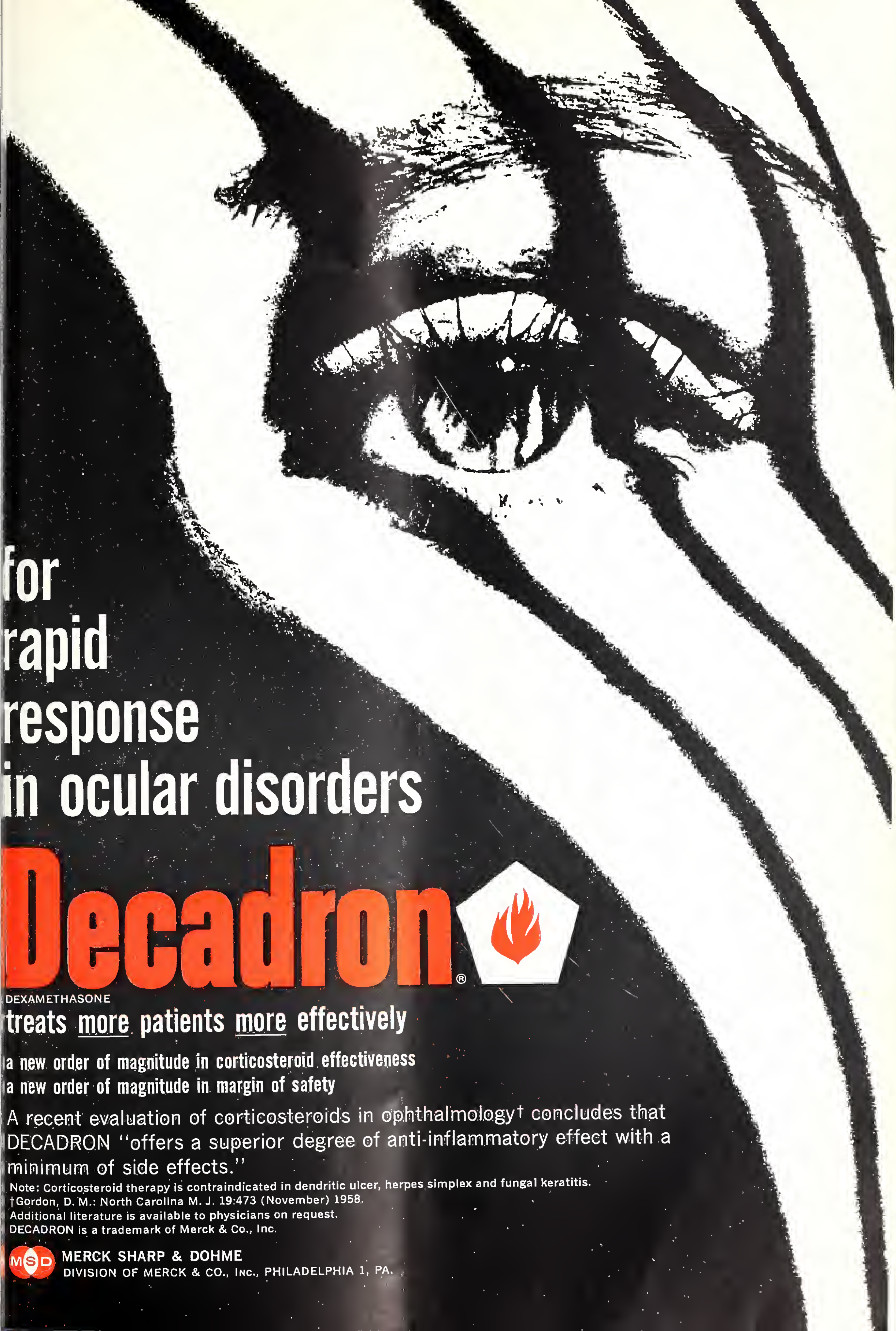
When the last census was taken, Missouri was not among the states that had made great strides in population growth and from predictions of population increases, that may be good rather than bad. Recently in *What's New,* it was predicted that in the next 30 years the population of the country will double. It points out that not only will the world be teeming with people but that there may be mineral and food and water shortages. Conclusion can be drawn from the article that disease has become a minimal factor in curtailing increase of population.

In the April issue of *Missouri Business,* published by the Missouri State Chamber of Commerce, appears an article "The Forand-Morse Proposal—Socialized Medicine, Step One." In part the article says: "With only a very few exceptions, Americans were of one mind about social security: It was more than a fine and a desirable thing. It was a necessary thing. And anybody who didn't think so was either benighted or an enemy of the people. Americans may very soon have ample reason to change their minds about the desirability of social security. Early last month in the House of Representatives, Rhode Island Democrat Aime Forand introduced a bill to amend the Social Security Act. Under its terms, all people entitled to old-age benefits would become eligible for hospitalization and health care to be paid for by the federal government." After giving details of the act, the article continues: "It is no accident that Representative Forand and Senator Morse seek to achieve their objective of getting the federal government to provide socialized medicine to the aged by amending the Social Security Act. For two decades of our national life and more now, the Social Security Act has been affirming, and giving the respectability of law to the basic principle of socialized medicine—the principle that the government is responsible for the welfare of its individual citizens. And for as long as it has been affirming this principle, the Social Security Act has been providing the machinery of governmental compulsion for the implementing of it—inforced 'savings' collected by means of payroll taxes. . . . From this point, it is only a very short step to socialized medicine. And certainly, the most logical way in which to take it is by amending a law already admirably suited in both basic philosophy and general mechanics to the administration of a program of socialized medicine—the Social Security Act." The article concludes with a statement that the Missouri State Chamber of Commerce has been fighting against such bills and will continue to do so.

The *Kansas City Star* points out that Kansas City may be in line to be the center of population for the entire country. It reviews the steps in this center of population moving to the West: in 1810, it was 40 miles northwest of Washington, D. C.; in 1850, 23 miles southeast of Parkersburg, W. Va.; in 1870, 48 miles east of Cincinnati; in 1910, in Bloomington, Ind.; in 1930, three miles northeast of Linton, Ind., and in 1950, near Olney, Ill.

The new "Congressional Directory" shows that states do not rely on "native sons" as was formerly thought so important, Missouri being among such

(Continued on page 632)



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†Gordon, D. M.: North Carolina M. J. 19:473 (November) 1958.
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Missouri Academy of General Practice

John F. Pearl, M.D.

More than 2,700 physicians attended the 11th Annual Scientific Assembly of the American Academy of General Practice at San Francisco, April 6 to 9. The total registration was 6,095.

HIGH LIGHTS FROM THE MEETING

The Congress of Delegates voted to reject four resolutions requesting action pro or con for a Certifying Board in General Practice, but adopted a resolution recommending that "continued study be authorized concerning a Board of General Practice."

The Congress of Delegates adopted a report of the Academy's Committee on Minimum Uniform Standards of Education as revised by the Reference Committee on Education.

This report calls for "a longer, better-planned minimum graduate program than is contained in the one-year rotating internship" for future general practitioners. Recommended is "a period of at least two years of formal hospital training following attainment of the medical degree in preparation for the general practice of medicine."

The report as adopted recommends that this minimum two-year program include "progressive training in the preventive, diagnostic, therapeutic and rehabilitative aspects of medicine in a very broad sense, as well as training in obstetrics and surgery."

Further recommendations state that: "Training in obstetrics should include all phases of normal and abnormal as well as operative obstetrics. Training in surgery should offer the resident an increasing opportunity to develop sound training and experience in the principles and practice of surgery."

A proposed increase in membership eligibility requirements was considered but Delegates were not willing to set the date for future minimum graduate training standards to become effective as applied to Academy membership eligibility.

The Delegates adopted a resolution asking that the Academy uphold free choice of physician as "a fundamental principle incontrovertible, unalterable and essential to good medical care without qualification," and further instructed that a copy be sent to every member of the House of Delegates of the American Medical Association just prior to its June, 1959 meeting.

In other actions, the Congress of Delegates:

1. Strongly endorsed the Keogh-Simpson Bill for self-employed retirement benefits and urged Delegates to contact their Senators in support of the bill.
2. Amended the By-Laws to permit members who may enter specialty training or practice to retain affiliation with the Academy as "sustaining members."
3. Recommended that medical school instructors spend time with private physicians observing actual problems of private practice.
4. Reaffirmed approval of establishing general practice departments in hospitals, with credit for attendance of meetings of such departments.
5. Supported principle of surgical preceptorships for general practitioners.

Have you marked your calendar for Saturday and Sunday, November 7-8, 1959? The 11th Annual Assembly of the Missouri Academy of General Practice meets *then* at the Chase Hotel in St. Louis.

Across Missouri

(Continued from page 630)

states. Three of Missouri's eleven House members were born outside the state. Representative Bolling of Kansas City was born in New York, Representative Karsten of St. Louis at San Antonio, Texas, and Representative Brown of Springfield at Coweta, Okla. Senator Symington was born in Massachusetts. Senator Fulbright of Arkansas was born in Missouri.

During 1958 the 2 per cent Missouri sales tax brought to the state a total of $103,677,076. The last quarter of the year was the largest with $28,449,282. Retail food merchants made 19,072 returns during that period and paid $6,829,794 and automotive dealers paid $5,169,805. The sales tax department said that the last quarter collections in 1958 were $2,069,768 more than was paid to the state during the same period of 1957.

In elections early in April, six counties voted to set up county-wide systems of libraries, bringing to 61 the number of counties now having library systems, or soon to have. Each of the six new plans will be financed by a one-mill tax.

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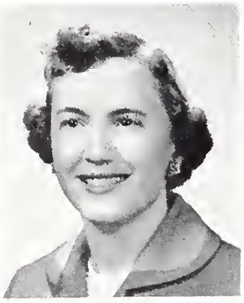
The Woman's Auxiliary

MRS. STANLEY S. PETERSON

The literal meaning of the word, "Convention"—"coming together"—describes the best part of any convention, I think. Since returning from the recent meeting in Kansas City I have so many pleasant memories of seeing and visiting with people I had not seen for a year or more. Under the gracious guidance of our hospitable Jackson County Auxiliary, all the sessions, both business and social, went off smoothly, and we were royally entertained. I wish I could give credit here to each of the many women who helped the county president, Mrs. Stewart Gillmor, to make the convention an outstanding success.


Mrs. Stanley S. Peterson

As long as I am "wishing," I wish every Auxiliary member in the state could have joined us on Sunday evening for a "trip to Alaska." The delicious food, clever costumes and decorations, and unusual entertainment made us truly feel that we were personally welcoming our 49th state.

I wish every member could have attended the luncheon on Monday in the veritable garden of tulips—the profusion of flowers in the decorations were challenged only by the profusion of flowers on the beautiful new spring hats of the members present! I wish you could have heard the lovely singing of Esther Bauman's brother, Charles Williamson, an instructor of voice at Fort Worth, Texas. He was accompanied by Esther's sister, Mrs. E. H. White, of St. Joseph, and it was inspiring indeed to see the true affection and admiration these sisters and brother held for each other. Mr. Williamson also sang at the Memorial Service and at the Tuesday luncheon.

I wish you could also have attended the Tuesday luncheon, when the gracious president of the Auxiliary to the Southern Medical Association, Mrs. George W. Owen, spoke to us, and we were entertained by a style show of fabulous "western" clothes, and the latest styles for milady's pet doggie.

You are probably thinking we had nothing but fun—but we also had some serious business sessions at which we heard reports from county presidents, describing each county's "Our Best" project, and you would have been proud to hear of the activities of the doctors' wives in Missouri.

When the Point System Reports were tallied, Jasper County was named Missouri's "Outstanding Auxiliary," and was awarded the gold cup for the second consecutive year. Under the guidance of their capable president, Mrs. Lawrence Crispell, of Joplin, this group had done outstanding work in every phase of the Auxiliary program.

Since the Medical Student Loan Fund is now self-supporting, we also voted to change the By-Laws, channeling more money into the general fund, giving each committee chairman twice the amount she had to work with last year, and challenging her to produce twice the results.

The following new officers were elected and installed by Mrs. Charles T. Shepherd, a past state president from St. Louis County: President, Mrs. Stanley S. Peterson, Springfield; President-elect, Mrs. Jordan Kelling, Waverly; 1st Vice-President, Mrs. J. Martyn Schattyn, St. Louis County; 2nd Vice-President, Mrs. Maurice Chastain, Kansas City (Clay Co.); 3rd Vice-President, Mrs. Stewart Gillmor, Kansas City; 4th Vice-President, Mrs. Lawrence Crispell, Joplin; Recording Secretary, Mrs. Carl Ferris, Kansas City; Treasurer, Mrs. William R. Rost, St. Joseph; Auditor, Mrs. J. S. Summers, Jr., Jefferson City; Corresponding Secretary, Mrs. Durward G. Hall, Springfield, and Parliamentarian, Mrs. Armand D. Fries, St. Louis.

Newly elected directors for Districts 1-5 were Mrs. J. L. Fisher, St. Joseph; Mrs. J. W. Well, Palmyra; Mrs. Oliver Tjoflat, St. Louis; Mrs. Wm. H. Grundman, St. Louis County; and Mrs. James C. Cope, Columbia.

The next "coming together" to which we are looking forward is the convention in Atlantic City June 8-12 of the Woman's Auxiliary to the American Medical Association. At the convention in Kansas City, the following delegates were elected to attend the National Convention: Mrs. Stanley S. Peterson, Springfield; Mrs. Jordan Kelling, Waverly; Mrs. Durward G. Hall, Springfield; Mrs. Ralph Perry, Kansas City; Mrs. E. F. Butler, St. Joseph; Mrs. Doyle C. Whitman, Kansas City, and Mrs. W. E. Martin, Odessa.

The following were elected as alternate delegates: Mrs. Harry M. Gilkey, Kansas City; Mrs. Arthur Neilson, St. Louis; Mrs. F. H. Maples, Mount Vernon; Mrs. Stewart Gillmor, Kansas City; Mrs. Lee T. Ford, Jr., St. Louis, and Mrs. H. E. Petersen, St. Joseph.

Convention headquarters will be the Hotel Haddon Hall, with registration from noon Sunday, June 7, to noon Thursday, June 11. We hope the wife of every physician from Missouri who is attending the convention in Atlantic City will register and attend at least some of the sessions to see

(Continued on page 699)

Missouri Medicine

JOURNAL OF THE MISSOURI STATE MEDICAL ASSOCIATION

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Vol. 56 June, 1959 Number 6

Pathogenesis of Atherosclerosis

Present Concept

MAXWELL G. BERRY., M.D., *Kansas City*

THE AVERAGE AMERICAN man out-works and out-produces his contemporaries throughout the entire world but, judging by statistical evidence, he pays a high price for this success because one American man in every two is slated to die prematurely from some kind of heart and vascular disease.[1] These statistics, when combined with the number of persons suffering disablement from the same illness, make cardiovascular disease by far the most important medical-social-financial-political problem in this country.

During the Korean conflict the average age of the soldiers who were killed was 22 years. Autopsies of these young men showed that 77.3 per cent had well developed (Grade I) coronary plaques.[2] A carefully studied autopsy series of several hundred random patients revealed the presence of severe coronary atherosclerosis, Grade III or more, in 76 per cent of the men[3] at 50 years of age. Cerebral atherosclerosis develops about five years later than the same disease in the coronary arteries.[4]

Investigation of the atherosclerosis problem has been directed either to a study of affected patients or to experimental production of the disease. Major difficulties are encountered in either approach. Clinical investigations are hindered because there is at present no means of detecting the disease in its early stages.[6] Experimental production of atheroma has been accomplished in animals. However, this experimentally produced arterial disease differs in several respects from human atherosclerosis and it is doubtful if there is a valid comparison between the experimentally produced lesions and the atheroma seen clinically.

Neither a decade of intensive study at the National Heart Institute nor the work of many private groups and individuals have contributed anything of established value.[1]

"The etiology and epidemiology of atherosclerosis are completely unknown. It is important that the physician does not permit good judgment to be altered by undue emotionalism and competitiveness among investigators."[5]

Popular and current theories of pathogenesis of atheroma emphasize one or more of the following factors in the development or acceleration of the process: age and sex, body build, stress, hypertension, heredity, exercise, infection, diabetes, obesity, tobacco, diet, faulty lipid metabolism and hyperlipemia.

The influence of age is well known. Atherosclerosis increases more or less rapidly in men at age 40 and the incidence decreases somewhat around 70. In women at 50 the incidence approaches that in men and remains comparable after this age.[3, 4] The difference in incidence at ages 40 to 50 has prompted much speculation concerning sex influences. However, estrogen administered in the nonfeminizing dose range in men will neither delay nor diminish atherosclerosis.[9] Eunuchs have a female-like incidence of atherosclerosis in middle age and when old, but this occurs only in individuals castrated in early teens.[10]

Stocky individuals, the so-called "mesomorph" type, apparently have atherosclerosis earlier than thinner subjects.[11]

Emotional stress is known to affect smooth muscle and glandular secretion through specific neural pathways, and may increase receptiveness of vascular walls, elevate blood pressure, increase blood cholesterol and accelerate blood clotting.[12] The "cold war against our emotional environment" may force us into fatigue and into making so many commitments that no time is left for recreation or

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From the Department of Medicine, St. Luke's Hospital, Kansas City, Mo.

exercise. Heart attacks attributed to "hard work, selfless devotion to duty, and laudable ambition" may in reality be due to "physical indolence and gluttony."[13]

Hypertension has been called the most important factor in atherosclerosis.[9] Moschocowitz lists a number of reasons for this statement including: (1) the age of occurrence is lower and lesions intensified in hypertension; (2) the difference in occurrence in systematic and pulmonary arteries where the only important difference is the intra-arterial pressure; (3) the fact that pulmonary artery atherosclerosis develops with elevated pulmonary pressure as in mitral stenosis and "essential" pulmonary hypertension; (4) atherosclerosis is definitely less common and less severe in hypotensive individuals; (5) atherosclerotic lesions are intensified at points of resistance in the arteries. Moschocowitz states that "atherosclerosis is an inescapable destiny," and that "arteriosclerosis= intravascular pressure x time." This author makes a convincing argument but in eight reported cases of proved coronary heart disease under age 35 only one had hypertension.[14]

All observant clincians have seen coronary artery disease and other atherosclerosis occur in several members of a family. In a recent study there is stated to be an important non-sex-linked genetic component in serum cholesterol (and atherosclerosis).[15] More important, probably, is inherited anatomic arterial variation.

Sedentary occupations and the lack of exercise have received some publicity recently. However, aside from the fact that the initial myocardial infarct is more often fatal in sedentary workers as compared to those physically more active,[16] no definite effects in inhibiting or treating atherosclerosis can be attributed to exercise alone.[17]

Infectious diseases may initiate atherosclerosis and vasculitis. Among the infections in which atheroma are known to occur are typhoid, rheumatic fever and pyogenic infections.[14] The arteritis of tsutsugamushi fever[18] as well as that of virus diseases and collagen disease seldom, if ever, plays a part in clinical atherosclerosis.

Diabetes is a known accelerating factor in atherosclerotic vascular disease. However, experience with diabetic patients shows no consistent correlation between the degree of atheroma and the level of blood cholesterol. Possibly, the vascular degenerative diseases of all types which diabetic patients develop so frequently are due to repeated chemical injury to the vascular lining by high levels of blood glucose.[19] The diabetic person with advanced atherosclerotic disease is much more apt to be one who has had poor diabetic control than one with a high blood cholesterol.

Obesity has been shown by actuarial tables of life insurance companies to be associated with an increase in mortality from coronary heart disease.[20] It probably accelerates all atherosclerosis also. It does not produce the disease in very young men.[11] However, one does not need proof of the saying "there are not many *fat* old men."

There has been indisputable evidence linking tobacco smoking to increased incidence of coronary heart disease.[21, 22, 23] There is a tremendous difference in coronary death rates of heavy smokers as compared to non smokers. Tobacco smoking in this country is common; coronary heart disease is common. Studies of Bantus, Indians, and wartime Scandanavians all show a low incidence of coronary disease where no tobacco is used. In our own male patients with acute myocardial infarcts 98 per cent were heavy smokers compared with an incidence of 56 per cent smokers among our total male patient population. The known universal effects of tobacco on the circulatory system—vascular constriction, elevation of blood pressure and acceleration of the pulse—repeated 20 or more times a day, 7,300 or more times a year for 20 or more years, could explain this association of tobacco with coronary artery disease.

For more than a century the fatty substances in atheroma have attracted the interest of physicians. The lipid nature of the arterial lesion was almost certainly the initial stimulus to the theory widely held today that faulty metabolism, faulty transport or ingestion of excessive amounts of lipids may be responsible for atherosclerosis. Wood,[24] after an opening statement that "the cause of human atheroma remains unknown," lists the following points of evidence linking disturbance of the blood lipids to atherosclerosis:

1. In the animal kingdom man alone suffers from atherosclerotic disease. The blood lipids are all higher in man than in other mammals.
2. Only the newborn human infant is immune from atherosclerosis.
3. Estrogens experimentally tend to restore the normal lipid pattern.
4. All diseases known to be associated with altered (elevated) blood lipids are also associated with a high incidence of atherosclerosis.
5. Atherosclerosis has been produced in animals (only) by means of a high cholesterol intake.
6. The atheromatous lesions themselves contain a high proportion of cholesterol.
7. Atherosclerosis is rare in people who live on a vegetarian diet low in fat.

In addition, there is a high proportion of fat in the American diet. The Scandinavian war starvation was accompanied by a lower than usual rate of atherosclerotic heart disease; there is a high rate of atherosclerosis in American Negroes on a high pork diet; there is a low rate of atheroma in the Japanese on a native rice diet and a high rate of the same disease in the same people eating a high fat diet in America. Vitamin B_6 may be grossly deficient in our diet since it is inactivated by tracer quantities of chromium universally present in our water, and vitamin B_6 apparently serves as a coenzyme in the metabolic cycle in which saturated fats are desaturated.

Investigation of the role of lipids in atheroma has involved study of the lesions in the involved arterial wall, experimentally-produced atheroma and study of lipid metabolism in man.

As regards the arterial wall, the initial lesion in atheroma does not contain any lipid at all. There may be hemorrhage, fibrin and fragmentation, but, initially, no fat.[25] Cholesterol, possibly other lipids, can be manufactured by an isolated bit of artery wall immersed in a medium containing no fat at all, and, in the midst of all the so-called "scientific" investigations, no one has yet completely determined the chemical composition of the atherosclerotic lesion itself.[26]

Cholesterol arterial disease resembling atheroma has been produced experimentally in rabbits, guinea pigs, hamsters, pigs and chickens by feeding them large quantities of animal fat. It has been produced in dogs by pretreatment with thiouracil or previous production of hypertension and then high cholesterol diet. The condition has been produced in monkeys by pyridoxine deficiency or by cholesterol plus diets deficient in sulfur containing amino acids, and in rats by combination of high cholesterol diet plus hypertension and thiouracil.[8]

In the last year or two most of the animal investigation of cholesterol-induced atheromatous disease seems to have come to a dead end street. It is to be hoped that in the near future discovery of a means for blocking one of the metabolic cycles or enzyme systems involving some hitherto unknown facet of lipid metabolism will yield much more usable information for the clinician.

There has been intensive study of lipids and lipid metabolism because of the previously mentioned appearance of the plaques and because of the increased frequency of atheroma in patients with hyperlipemia, usually hypercholesterolemia. Cholesterol has been the lipid most studied, partially because of the the early development of a reliable method of measure.[27] Other lipids have been measured, including phospholipids and their ratio to cholesterol, lipoprotein studies by the ultracentrifuge[28] and by electrophoresis and other means of separation.[29, 30] Elevation of tryglyceride levels has recently been stated to be associated with coronary atherosclerosis.[31] The degree of saturation of fatty acids in the diet has been an interesting study.[32] Many other aspects of this great investigative effort in study of lipids are not mentioned here solely from lack of space. However, total blood cholesterol estimation is still regarded as the best measurement of blood lipids.[6, 7, 33, 34]

My own experience in clinical research with patients and their diets goes back to 1939. From that date all new patients were subjected to two particular studies. First, on new patient office histories the question was asked as to how much fat, specifically milk, butter, eggs, gravy and fat meat, the patient ate. After surveying about 4,000 patients this project was abandoned because there was apparently no significant difference in the diet of patients with coronary artery disease and those who had no vascular trouble of any kind. Recently however, in 40 men and women with acute myocardial infarction, 38 gave a history of eating abnormal amounts of fat meat, and/or gravy, and/or butter. The second phase of the 1939 project is still being pursued. We have determined the blood cholesterol levels on about 15,000 consecutive patients. This is a significant segment of the local population and allows some deductions to be drawn. Included in this group are the cholesterol levels of 200 consecutive patients with acute myocardial infarcts. The controls were patients of the same ages and sexes during the same years who had no overt vascular disease, diabetes or hypothyroidism. The results shown in table 1 compare the two groups. There is only a moderate increase in the middle zones of cholesterol levels in the coronary patients as compared to controls.

TABLE 1

BLOOD CHOLESTEROL LEVELS IN ACUTE MYOCARDIAL INFARCTION

Cholesterol Mg. %	*100 to 150*	*150 to 200*	*200 to 250*	*250 to 300*	*300 to 350*	*350 and Over*
Controls	7.5%	43.6%	30.0%	11.3%	3.8%	3.8%
Infarcts	9.8%	34.5%	41.4%	11.2%	2.6%	2.6%

The minor difference in patients with coronary disease and controls is enough to discourage undue enthusiasm over all the agents which are available and which are claimed to affect atherogenesis by lowering blood lipids. However, it is enough to encourage conservative and relatively harmless efforts to lower blood lipids in patients with known atherosclerosis.

The following practical applications of these theories can be made in the form of advice to patients:

Sex hormones (female) will produce "medical castration" before the blood lipids will be reduced significantly. Thyroid hormone, where indicated, may be of help. Control of diabetes should be by Joslin's strict precepts.

So-called "stress" must be evaluated with extreme care, as the conflict of having to accept partial success with the limitation of "stress" of work may be more stressful than the effort required to attain the full reward. Certainly American physicians in the high incidence coronary group are under nowhere near the stress of the Chinese tenant farmer whose family actually starves at times, whose crop is destroyed by flood or drought two years out of six, and whose efforts to improve his and his children's status are almost totally frustrated.

Hypertension should be and usually can be controlled with safety. The double reward of prevention of the direct complications of hypertension as well as delay in development of atherosclerosis makes blood pressure reduction important.

With the evidence at hand, smoking should be discouraged in all patients with atherosclerotic heart disease. Most patients are grateful for the relief from this addiction, and there are no known seriously harmful results from discontinuing tobacco.

Exercise may be and probably is to be encouraged, but only in patients who have no dyspnea, pain or other symptoms of heart dysfunction.

Obesity is one possible contributing factor in atheroma which can be controlled. There is no scientific evidence that being excessively fat has any virtue at all, even on one's disposition.

As to diet, the restriction of total fat to about 30 per cent of caloric intake is justified. From the fact that unsaturated fats are more "essential," that substitution of unsaturated fats for "stiff" fats lowers blood cholesterol, and from knowledge that the saturated fats when eaten do cause temporary increase in cholesterol with other lipids, one is probably justified in substituting oils for hard fats in cooking and perhaps as fully as possible in the whole diet. This remains to be proved.

Agents used to lower blood cholesterol and blood lipids are not warranted except where there is hypercholesterolemia (total cholesterol above 300 mg. per 100 cc.), and this does not occur in more than 5 per cent of patients. Figures of more than 5 per cent hypercholesterolemia in a series probably means either selection from families with lipid metabolic defect or with an excess of individuals with diabetes or myxedema.

When hypercholesterolemia (or hyperlipemia) is present, dietary restrictions, reduction of weight and the administration of nicotinic acid[35, 36] in large doses are justified. The latter is at present apparently the best pharmaceutical means by which blood cholesterol levels can be safely reduced, and the doses of 2,000 to 3,000 mg. per day necessary to produce this effect can be tolerated by about 75 per cent of patients.

Finally, the prescribing of rigid low fat, low cholesterol, low saturated fat diets, various "specific" lipotrophics, sitosterols, heparin, pyridoxine, hormones and excessive amounts of whiskey for the prevention of atherosclerosis in patients who do not have proved hypercholesterolemia, is not sound medical practice.

201 Plaza Medical Bldg.

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Observations on Infections With Enteroviruses In Missouri, 1956

C. R. GRAVELLE, M.S.; TOM D. Y. CHIN, M.D.; IRMA C. ADAMS, B.S., AND
H. A. WENNER, M.D.

THE USE OF tissue cultures has facilitated the isolation of new viral agents from the gastrointestinal tract of patients with clinical poliomyelitis. In addition to the detection of polioviruses, the tissue culture method has yielded important information on other enteroviruses within the Coxsackie and ECHO groups. A number of studies have presented reasonably convincing evidence that both Coxsackie and certain ECHO viruses are capable of causing illnesses simulating nonparalytic poliomyelitis; occasionally they may have been responsible for muscular weakness and paresis. This report will describe the observations on enterovirus isolations from specimens obtained during the 1956 poliomyelitis surveillance program in the state of Missouri.

MATERIAL AND METHODS

Specimens of feces were collected by private physicians, local health department personnel and hospital staffs from persons suspected of having poliomyelitis or a polio-like disease. Specimens were mailed unfrozen to this laboratory at the University of Kansas Medical Center, Kansas City, Kansas, or to the laboratory of the Missouri Division of Public Health at Jefferson City, Missouri. The patient's age, residence, date(s) of onset, type of clinical illness and date(s) of sample collection were either submitted with the specimen or obtained from the poliomyelitis case surveillance form. An analysis of the influence of Salk vaccine on enterovirus isolations was not attempted since information on Salk vaccine injections was available for less than 10 per cent of the persons from whom stool specimens were obtained.

The methods used for preparation of stool specimens and for isolation and identification of enteroviruses were essentially those described previously.[1, 2] Fecal specimens were triturated in sterile distilled water to make a 10 per cent suspension which was centrifuged at 1,500 rpm for 15 minutes. The supernatant was removed and centrifuged again at 5,000 rpm for 30 minutes. This clear supernatant fluid was treated with penicillin and streptomycin (100 units and 100 micrograms respectively) and incubated at room temperature for 30 minutes. The prepared extracts were either inoculated immediately or stored at minus 20 C. until used.

Viruses were isolated and identified in cultures of monkey kidney epithelial cells propagated in roller tubes. Three roller tube cultures per specimen were employed and each culture was inoculated with 0.1 ml. of stool extract. The cultures were examined every other day for evidence of cytolysis using low power microscopy (60X). The fluid portion of tissue cultures which showed cytolysis was "harvested" and stored at minus 20 C. for further identification. Specimens which showed no cytolysis after two consecutive passages were considered negative.

The viruses were identified by neutralization tests with hyperimmune monkey sera against poliovirus types 1, 2, and 3; Coxsackie virus types A9, B1 to B5; and ECHO virus types 1 to 13. The infected tissue culture fluid was diluted 1:100 with phosphate buffered saline solution and mixed with an equal volume of each antiserum. The serum-virus mixture was incubated at room temperature for 30 minutes before inoculation into three tissue culture tubes. Diluted infected tissue culture fluid alone was used as positive control. The virus was considered neutralized by the test serum when no cytolysis was seen in tubes containing the serum-virus mixture for at least two days after complete degeneration had occurred in the positive control tubes.

Attempts at identification were first made with poliovirus antisera, using either individual antisera or a pool of types 1, 2 and 3. If the virus was not neutralized by poliovirus antisera, identification was then attempted with a pool of antisera prepared against Coxsackie virus types A9, B1 to B5. Those agents which were not neutralized by poliovirus or Coxsackie virus antisera were tested with type specific ECHO antisera. Three pools of ECHO antisera were used. The composition of the pools was as follows: Pool 1 contained antisera against types 1, 3, 5 and 7; Pool 2, against types 2, 11, 12 and 13; Pool 3, against types 6, 8, 9 and 10. Antiserum against ECHO virus type 4 was used alone. When an agent was neutralized by a pool of antisera specific identification was made with individual antisera from that pool. Cytopathogenic

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From the Kansas City Field Station, Communicable Disease Center, Bureau of State Services, Public Health Service, U. S. Department of Health, Education, and Welfare; Division of Laboratories, Missouri Department of Public Health and Welfare, Jefferson City, Missouri, and Hixon Laboratory, University of Kansas Medical School, Kansas City, Kansas.

(C. R. G. and T. D. Y. C.) S. A. San. (R); Assistant Chief, Kansas City, Kansas.

(I. C. A.) Director of Laboratories, Jefferson City.

(H. A. W.) Research Professor of Pediatrics, Kansas City, Kansas.

agents which were not neutralized by any of the antiserum pools were considered to be a mixture of viruses. Attempts were then made to identify the mixed viruses by using combinations of polio, Coxsackie and ECHO antisera.

RESULTS

Stool specimens were obtained from 424 persons, most of whom were suspected of being ill from poliomyelitis. Specimens from 227 persons (54 per cent) yielded a cytopathogenic agent. The frequency of isolation by type of agent is summarized in table 1. One hundred thirty nine of these agents (61 per cent) were identified as strains of poliovirus: 131 were type 1, 5 were type 2 and 3 were type 3. Coxsackie viruses were identified in 78 (34 per cent) of the positive specimens; 65 strains were type B5, 4 strains each were types A9, B2 and B3 and one strain was type B4. The four ECHO viruses were identified as types 1, 4, 6 and 9. Four stool specimens each yielded a mixture of two viruses. These mixed isolates were identified as: poliovirus type 1 plus Coxsackie type B5; Coxsackie type B5 plus ECHO type 9 and two mixtures of Coxsackie A9 plus poliovirus type 1. Two agents were not identified by the neutralization methods used in this study.

TABLE 1

ISOLATIONS OF ENTEROVIRUSES FROM FECES OF 424 PERSONS, POLIOMYELITIS SURVEILLANCE, MISSOURI, 1956

Virus Type	*Number of Persons*	*Per Cent of Total*
Poliomyelitis	139	33.0
Coxsackie	78	18.0
ECHO	4	1.0
Other*	6	2.0
Negative	197	46.0
Total	424	100.0

* Mixed and unidentified viruses.

The geographic distribution of polioviruses and Coxsackie viruses is plotted by the residence of the patient in figure 1. The largest number of enteroviruses were obtained from individuals residing in the two metropolitan areas of Kansas City and St. Louis. Poliovirus was encountered three times more frequently than Coxsackie virus in these areas. In the other areas of the state, however, the ratio of these two enteroviruses was markedly different from that found in the metropolitan areas. In the northwestern section of the state, Coxsackie viruses were found more often than polioviruses. In the southern and eastern counties these two enteroviruses were about equally distributed.

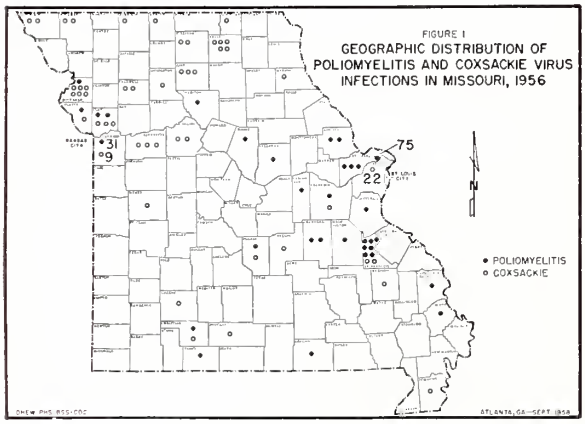
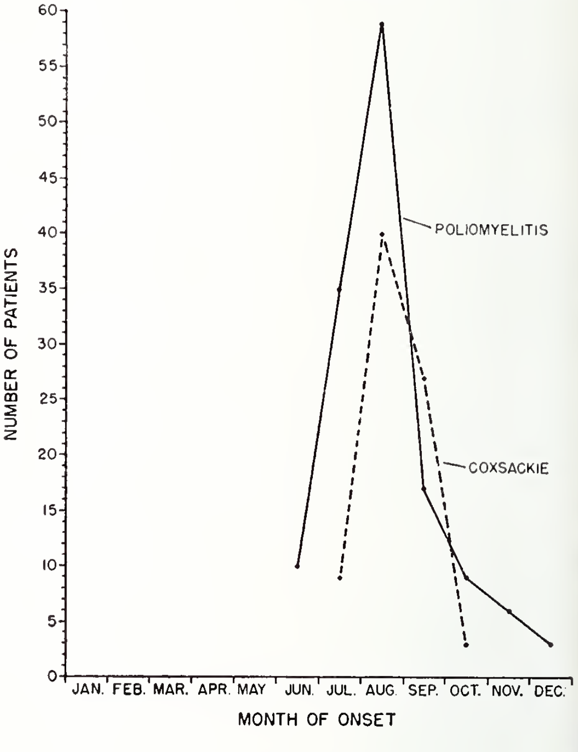


FIGURE I
GEOGRAPHIC DISTRIBUTION OF POLIOMYELITIS AND COXSACKIE VIRUS INFECTIONS IN MISSOURI, 1956

The occurrence of poliovirus and Coxsackie virus infections by month of onset is compared in figure 2. When the distribution is compared by each monthly total (table 2) the peak incidence of both occurred in August. However, when the distribution is compared by per cent of monthly total, the highest per cent of poliovirus isolations was from specimens obtained in July, while the highest per cent of Coxsackie virus isolations was from specimens obtained in September.

FIGURE 2

ISOLATIONS OF POLIOMYELITIS AND COXSACKIE VIRUSES FROM FECES OF PATIENTS, MISSOURI, 1956



The frequency of isolation of poliovirus and Coxsackie virus according to the age of the patient is shown in table 3. Polioviruses were isolated most frequently from patients under 10 years of age, and were isolated less frequently as the age

TABLE 2

ISOLATIONS OF POLIOMYELITIS AND COXSACKIE VIRUS FROM FECES, BY MONTH OF ONSET OF ILLNESS, MISSOURI, 1956

Month of Onset	*Total Persons*	*Poliomyelitis* NUMBER	*Poliomyelitis* PER CENT MONTHLY TOTAL	*Coxsackie* NUMBER	*Coxsackie* PER CENT MONTHLY TOTAL
Jan.	4	0		0	
Feb.	6	0		0	
March	1	0		0	
April	4	0		0	
May	7	0		0	
June	25	10	40	0	
July	69	35	50	9	13
Aug.	148	59	40	40	27
Sept.	88	17	19	27	30
Oct.	24	9	33	3	12
Nov.	11	6	55	0	
Dec.	4	3	75	0	

TABLE 3

FREQUENCY OF POLIOMYELITIS AND COXSACKIE VIRUS ISOLATIONS FROM FECES, BY AGE, MISSOURI, 1956

Age	*Total**	*Poliomyelitis* NUMBER ISOLATED	*Poliomyelitis* PER CENT	*Coxsackie* NUMBER ISOLATED	*Coxsackie* PER CENT
0-9	206	89	44	32	16
10-19	94	29	31	20	21
20-29	63	14	22	19	30
30-over	24	5	20	5	20
Unknown	38	2	5	2	5

* Includes ECHO, mixed, unidentified and negative isolations.

of the patient increased. Coxsackie viruses were isolated somewhat more frequently from patients between the ages of 20 to 29 than from patients in other age groups.

The types of clinical illness from which polio and Coxsackie viruses were isolated are shown in table 4. One hundred nineteen patients were reported to have paralytic poliomyelitis. Eighty-three (70 per cent) of these patients yielded a poliovirus and one yielded a Coxsackie virus. Nonparalytic poliomyelitis was reported from 178 patients. Poliovirus was isolated from 42 (24 per cent) while Coxsackie virus was isolated from 59 (33 per cent) of those nonparalytic cases. Specimens were received from 128 patients who were diagnosed as poliomyelitis suspects. Poliovirus was isolated from 14 and Coxsackie virus from 18 of these suspect cases.

TABLE 4

ENTEROVIRUS ISOLATIONS FROM FECES ACCORDING TO TYPE OF CLINICAL DIAGNOSIS, MISSOURI, 1956

Case	*Total*	*Poliomyelitis* NUMBER	*Poliomyelitis* PER CENT	*Coxsackie* NUMBER	*Coxsackie* PER CENT
Paralytic	119	83	70	1	1
Non-paralytic	178	42	24	59	33
Poliomyelitis Suspect	128	14	10	18	14
Total	424	139	33	78	18

One of the nonpolio paralytic infections was believed to have been caused by Coxsackie virus type A9. This patient was a 27 year old male who had weakness involving the right forearm and thigh. The weakness was still evident six weeks after discharge from the hospital.

The patient whose stool yielded a mixture of Coxsackie virus B5 and ECHO virus type 9 was a 30 year old female, who was reported to have bulbo-spinal poliomyelitis and died on the seventh day of illness. At autopsy, marked destruction of the anterior horn cells of the cervical cord was noted, with many perivascular cuffings seen in the brain stem and midbrain. Neither paired sera nor brain tissues were available for study. The four patients from whom ECHO virus was isolated had nonparalytic illnesses. Rash was not observed in the 9 year old male with ECHO virus type 9, nor in the 3½ year old male with ECHO virus type 4.

The frequency of virus isolations according to interval between date of onset and date of sampling is shown in table 5. As the interval between date of onset and date of specimen collection increased, the number of specimens decreased. Although the number of specimens collected was smaller in each succeeding week, a high percentage of isolations could still be made from stool specimens obtained three or more weeks after the onset of symptoms. Coxsackie viruses were isolated most frequently from stool samples during the first week, and less frequently as the time interval between onset of symptoms and collection of specimens increased.

TABLE 5

COMPARISON OF ISOLATION OF POLIOMYELITIS AND COXSACKIE VIRUS BY INTERVAL BETWEEN ONSET OF ILLNESS AND STOOL COLLECTION, MISSOURI, 1956

Interval (Weeks)	*Persons Sampled*	*Poliomyelitis* NUMBER	*Poliomyelitis* PER CENT OF SAMPLE	*Coxsackie* NUMBER	*Coxsackie* PER CENT OF SAMPLE
1	207	65	31	57	27
2	102	51	51	17	16
3 or more	47	17	36	4	9

DISCUSSION

In order to evaluate properly a poliomyelitis program or to investigate problems of poliomyelitis in a community, adequate laboratory facilities must be available to provide etiologic differentiation of poliomyelitis from polio-like diseases. Etiologic studies of the last several years have shown that the frequency of encountering a particular Coxsackie or ECHO virus varies from year to year and from one community to another.[4, 5, 6, 7] In 1956, Coxsackie virus type B5 was the most common nonpoliovirus encountered in Missouri. During the summer and fall of that year, this virus was widespread in the middlewestern United States and appeared in epidemic proportions in several localities in Iowa and in southern Minnesota.[4, 6] Epidemiologic studies of the localized outbreak in Mason City, Iowa, established the etiologic relationship between Coxsackie virus type B5 and aseptic meningitis.[1]

It is unfortunate that acute and convalescent sera were not available from the patient with paralytic disease whose stool yielded Coxsackie virus type A9, and that brain tissues were not obtained from the patient whose stool yielded a mixture of ECHO virus type 9 and Coxsackie type B5. Demonstration of a significant rise in homologous antibodies between acute and convalescent sera or recovery of a virus from the central nervous system tissues would seem to strengthen the etiologic relation between the disease observed and the virus recovered. In a recent study Hammon *et al*[8] reported recovery of Coxsackie A9 from the feces of a patient with paralytic disease. Although antibody studies against Coxsackie A9 were not done because of insufficient sera, serologic studies did not show evidence of concurrent poliovirus infection.

ECHO 9 and Coxsackie B5 are also known to cause muscle weakness. Verlinde recently reported recovery of ECHO 9 from the brain of an infant who died of encephalitis.[9] Foley *et al* observed mild residual muscle weakness in a 28 year old female 10 weeks after infection with ECHO 9.[10] Steigman reports residual mild atrophy of the right deltoid and abdominal musculature 15 months after infection with Coxsackie type B5.[11] Residual weakness has been observed in the left leg of a 9 year old male two years after infection with Coxsackie type B5.[12]

Of the 119 patients diagnosed as having paralytic poliomyelitis, 70 per cent were excreting poliovirus but only one patient was found to excrete a nonpoliovirus. The presence of paralysis is apparently an accurate aid to diagnosis. However, among the 178 patients diagnosed as having nonparalytic poliomyelitis, only 24 per cent yielded poliovirus while 32 per cent yielded Coxsackie virus. These observations reemphasize the need for careful evaluation of poliomyelitis incidence, since nonparalytic poliomyelitis may frequenty be caused by enteroviruses other than poliovirus.

SUMMARY

The surveillance of poliomyelitis and poliomyelitis-like illness (nonparalytic poliomyelitis) in Missouri in 1956 included laboratory study of stool specimens and a limited amount of clinical data. Stool specimens from 424 patients were tested for cytolytic agents in monkey kidney tissue culture. These specimens yielded 227 cytopathogenic agents which were identified as follows: 139 were strains of poliovirus, 78 were strains of Coxsackie virus and 10 were strains of ECHO and other enteroviruses. Two of the agents have not been identified.

Data on the clinical and epidemiologic characteristics of enterovirus infections were analyzed according to: type of enterovirus, geographic distribution, month of onset of illness, patient's age and type of illness, and interval between date of onset and date of sampling. Poliovirus was found in stool specimens from about 70 per cent of the patients diagnosed as having paralytic poliomyelitis, while only 24 per cent of those patients diagnosed as nonparalytic poliomyelitis were found to excrete poliovirus. These analyses reveal that illnesses often called nonparalytic poliomyelitis are related to infections with enteroviruses other than poliomyelitis.

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Symposium

Whiplash Injuries of the Neck

J. OTTO LOTTES, M.D., *St. Louis,* Moderator; ANDREW M. LUH, M.D.,
STANLEY M. LEYDIG, M.D., JOHN W. FRIES, M.D., AND
DONALD O. BURST, M.D., *St. Louis,* Participants

J. OTTO LOTTES, M.D.: The title "whiplash," even though it is not a true entity, has been in use for some time. It should be called "cervical syndrome" because the whiplash itself is just the mechanical process by which the injury is produced. It is one of the phases of the numerous other types of injuries as a sprain, ruptured disk, fracture or dislocation. Being mild and self-limited, few patients sought medical care years ago but two factors brought it into prominence in recent years.

First, the lowering of the seats of the automobiles is conducive to this injury. The old car seats came up to the back of the neck. When the car was struck in the rear, the head would only move through a short arc. Now, the front seat only supports the body below the middle of the shoulders allowing the head to travel through a longer arc. This has increased the incidence and the severity of the injury.

Second, people are now realizing that they can collect on this injury even though they know it is going to be a condition that will not give them permanent disability. When the financial gain became apparent, people were made more conscious of a neck injury. This probably is the most important reason that people seek medical care.

MECHANICS AND PATHOLOGY OF THE INJURY

ANDREW M. LUH, M.D.: In 1956 Gotton made a survey of 100 cases of whiplash injuries following automobile accidents after the settlements of litigation. He found 88 per cent had recovered, 12 per cent continued to have severe symptoms and 6 per cent continued to have medical treatment.

Though a substantial percentage of cases before settlement of litigation may be exaggerating symptoms, this survey indicates there are at least a few cases which have genuine complaints.

Functional Anatomy of Cervical Spine

The cervical spine differs in many respects from other parts of the spine in that it is particularly prone to injury during auto accidents due to its greater mobility and poor structural support. The vertebral bodies, in addition to the intervertebral disk, have small synovial joints between them on either side of the disk. These were described by Von Luschka in 1858 and have been named by various authors as lateral intervertebral joints or nuchal vertebral joints. These joints are of a great significance in the mechanism of cervical nerve root irritation. The intervertebral disk in the cervical region is three times thicker anteriorly than posteriorly and thus permits the normal forward curve of the cervical spine. The intervertebral foramen is ovoid in shape and has a greater vertical diameter than anteroposterior diameter, and is formed posteriorly by the articular facets and anteriorly by the joints of Luschka. The posterior intervertebral joints or joints between the facets have a 45 degree slope not only backward and downward but also laterally. This makes the cervical spine more susceptible to subluxation or dislocation. The precarious support of the odontoid process by the transverse ligament of the atlas is well known. All these demonstrate how a normal free range of motion has been obtained for head and neck at the expense of stability. The first two vertebrae provide the greatest amount of motion in nodding, axial rotation and lateral bending motions of the head. The greatest stress in hyperflexion falls on C_5 and C_6 and in hyperextension on C_4 and C_5.

Mechanics of Injury

A whip consists of a rod and a string with a knot at the end. In using the whip, the rod moves with the hand first and the string and the knot stay behind only to come forward with a slight jerk of the hand. Applying the same principle to the human body, the head is compared to the knot, the neck to the string and the body to the rod. In any mechanism of sudden changes in the velocity of the body, the head lags behind (primary whip component) for a while but later executes the opposite motion (lash or rebound component).

Jackson attributes 90 per cent of the whiplash injuries to rear-end collisions with hyperextension

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(A. M. L.) Orthopedic surgeon, St. Anthony's Hospital; instructor in orthopedic surgery, St. Louis University School of Medicine.

(S. M. L.) Orthopedic surgeon, St. Anthony's Hospital; instructor in orthopedic surgery, Washington University School of Medicine.

(J. W. F.) Director, Department of Radiology, St. Anthony's Hospital; instructor in radiology, St. Louis University School of Medicine.

(D. O. B.) Orthopedic surgeon, St. Anthony's Hospital; instructor in orthopedic surgery, St. Louis University School of Medicine.

(J. O. L.) Chief, section of orthopedic surgery, St. Anthony's Hospital; assistant professor of orthopedic surgery, Washington University School of Medicine.

first followed by hyperflexion. Sudden start or acceleration has the same effect. On the other hand, sudden stop or head-on collision throws the head to hyperflexion followed by hyperextension. Impact from the side causes hyperflexion to the side of impact followed by opposite motion.

McIntire observed these injuries frequently in airmen. Sudden thrust of catapult launching of aircraft produces hyperextension. Sudden forceful braking of aircraft while "hitting the cables" in carrier landings causes hyperflexion as a primary component.

Whatever may be the cause of injury, the neck is forced into extremes of movements; i.e., flexion, extension, side flexion and rotation resulting in compression, shearing, torsion, differential distention and bending forces active in different proportions. Sometimes the head and neck are thrown into several oscillations in the course of the injury.

Pathologic Anatomy

Sudden forceful excursions of the head may cause anything from minor contusions and sprains of the neck to severance of the cord with paraplegia. The injury may cause damage to ligaments, fascia, muscle, vessels, bones, joints, intervertebral disks, spinal cord and its roots in the neck. Besides the local damage the injury may involve the brain, the lower back or the hip. Fields has described the autonomic nervous system concussion syndrome caused by stretching, severance or pressure due to hemorrhage on the sympathetic or vagus chain. Middleton has described various disturbances of the eye, such as spastic mydriasis, loss of accommodation or Horner's syndrome. Gundrum observed tinnitus, deafness, vertigo and nausea in a few cases after whiplash injury.

In most cases, however, the injuries are comparatively less severe. Hematoma in the neck, retropharyngeal hematoma, rupture of muscles, fascial fibrosis, subclavian artery compression syndrome, painful neuromas and myositis ossificans are some of the lesions that have been found after whiplash injury. Rupture of intervertebral disk occurs in 1 to 2 per cent of cases with pressure on the cord or nerve roots. Ligamentous rupture and degeneration of the disk with slight subluxation of intervertebral joints are followed by hypertrophic changes in the joints. These changes may encroach on the anteroposterior diameter of the foramens, thus narrowing and crowding the nerve roots with resulting neuralgia. Greater occipital neuralgia, trigeminal neuralgia and brachial neuralgia have been found in some patients. According to Jackson, the fifth nerve root is most frequently irritated.

Severe injuries include compression fracture, fracture dislocation or simple dislocation of the cervical spine with or without involvement of the cord. Fractures of spinous processes are occasionally seen. Gershon-Cohen and others experimentally produced such fractures in three out of six cadavers.

Though there is a great amount of emotional overlay in patients with whiplash injuries due to litigation, and insurance complications, the organic damage to the various structures produces a vicious cycle of pain and rigidity which is difficult to control.

DR. LOTTES: Dr. Luh mentioned that experimental work was performed trying to produce this condition. Cadavers were laid on a table with the head overhanging the table. A strap was placed on the head of the cadaver and yanked vigorously in an attempt to simulate whiplash. They were able to produce a fracture of the spinous process in three out of six cases. They all occurred on hyperextension. This is proof that fractures can occur by this injury. In my practice, I have never seen a fracture produced by this injury; however, I have reviewed reports of such fractures in the literature.

EXAMINATION AND DIAGNOSIS

STANLEY M. LEYDIG, M.D.: This part of the symposium is concerned with the examination, diagnosis and differential diagnosis of whiplash injury to the cervical spine. An accurate history is a part of the examination. It should be recorded verbatim from the patient because at subsequent examinations, if the statements follow the same pattern it lends a little more credence to the patient's story. If the story varies frequently it suggests that the patient exaggerates complaints and may be malingering.

Examination of the cervical spine begins with inspection and the examiner attempts to see if the normal forward curve of the neck is reversed due to muscle spasm. This can be verified on lateral x-ray. The loss of the forward curve of the neck can be considered an objective finding. Palpation will locate the sites of tenderness and help determine if there is involuntary muscle guard and spasm of the muscles in the paravertebral area of the cervical spine. These are sometimes quite diffuse over the entire area, and sometimes they are localized. Examination of the range of motions of the neck are also important. The degree of flexion and extension is noted. The patient then bends the left ear toward the left shoulder, then to the opposite side, in addition to rotation of the head to the right and to the left. The percentage of limitation is recorded. Subsequent examinations and comparison of the findings with the first examination aid in determining the progress of the patient. If the history and physical findings follow the same pattern, and the range of motion increases, one can assume the patient is improving.

To complete the examination, an x-ray is always taken. An x-ray usually reveals negative rather than positive information. Fractures of the cervical spine are rare in a so-called whiplash injury of the neck. Degenerative changes are frequently present, and have been called osteoarthritis, which is a poor term because it is not a true arthritic process. If degenerative changes are present they are preexistent to the whiplash injury. I think that in such cases with degenerative changes the disability persists longer and convalescence is delayed. It has been reported that 12 per cent of these patients with whiplash injury continue to have symptoms indefinitely.

After the examination is completed and recorded an attempt is made to evaluate the pathology. This is difficult because in most cases objective findings are few and conclusions must be based on subjective findings. I believe the basic pathology is due to injury of the ligaments between the vertebrae. Avulsion of the fibers of which the ligament is composed may be responsible for initiating the pain. There may be stretching of some of the fibers which are components of the cervical nerves and perhaps the nerves involving the brachial plexus, and this is associated with nerve root irritation.

In the differential diagnosis, one must consider the scalenus anticus syndrome, which I think is a rare condition, described about twenty years ago by Ochsner and Gage. This is a syndrome in which pain radiates into one arm or both arms associated with tingling and numbness. I have looked for this syndrome for a long time, but have never seen one that I could prove. A cervical disk lesion must also be considered and in such cases x-ray frequently shows a narrowing of the disk space between C_5 and C_6. Other conditions to be considered are shoulder pathology such as bursitis or an arthritic process in the shoulder which may cause pain radiating into the neck and suprascapular area.

DR. LOTTES: There have been numerous publications concerning the complaints in these patients, but I think the most common complaint is headache, which occurs in about 70 per cent of the cases. Others will have complaints in the shoulders, hands, neck and back. Many of them have chest pain, either one side or the other, which can simulate a coronary or an ulcer. Gay and Abbott checked 50 patients following a second whiplash injury and they placed considerable importance on their findings. Seventy per cent of the people that had a second injury complained of radicular pain to occiput, the lower jaw, the anterior chest wall, the shoulder girdle or the upper extremity. The pain was described as being sharp and penetrating. They also had a loss of the normal curve of the neck. Twenty-six per cent had disk symptoms simulating completely ruptured disk and 10 per cent had an increase in arthritic symptoms which they had prior to this injury. Only one of them showed a subluxation and that was in the lower cervical vertebrae.

As Dr. Leydig mentioned, one hears all types of complaints. It takes a lot of "know-how" and repeated examinations to evaluate all of these complaints. Many patients will have a loss of sensation over the shoulder as evidenced by diminished pinprick in this area.

I have had several patients who have complained of pain along the posterior rib margins, with negative findings.

X-RAY EXAMINATION

J. W. FRIES, M.D.: My discussion concerns the x-ray examination. On the severe whiplash injury, the patient may be unable to stand and, occasionally, the patient may be unconscious. When this occurs, the patient should be kept in a supine posture with his neck in a neutral position because, if he stands, he could aggravate any severe fracture or dislocation of the cervical spine. When he is brought to the x-ray department, an elaborate x-ray examination is not indicated. The x-ray beam is directed horizontally and a film is made before any manipulation of the patient is undertaken. The x-ray is inspected to be certain that there is no gross abnormality present. Figure 1 illustrates the type of film obtained.

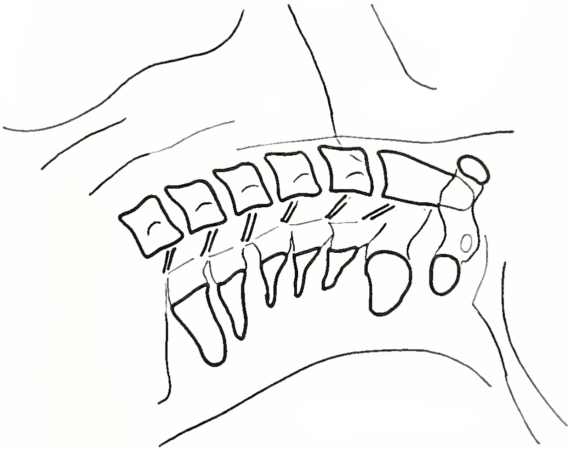

Fig. 1. Tracing of roentgenogram: Patient supine, x-ray beam horizontal. This is the initial examination made on the severely injured or the unconscious patient. This film is inspected for fracture, dislocation and prevertebral soft tissue edema before proceeding to a more detailed examination.

One of the most important things to look for on this x-ray, besides bone injury which is obvious, is the soft tissue line which is in front of the vertebrae. This line corresponds to the pharynx, hypopharynx and esophagus. This area can become hemorrhagic and edematous if the patient has a dislocated neck to the point that it is obstructing his airway. This type of complication is the real true emergency of the severe cervical injury which, at times, can be a severe whiplash injury plus other injuries. One would also look for fractures and other dislocations. If this initial examination is normal, a more detailed examination follows when the patient can cooperate.

Ordinarily the patient is referred for x-ray examination; he comes to the department either the day of the injury or the next day. He may walk in himself; he may have significant symptoms but he may not be acutely ill. This patient should have an extensive roentgen examination. The cervical spine is not large, but because of the many intricate bony areas that exist in it, a large number of x-rays are needed to appraise adequately all of its various anatomic surfaces. Most writers on the subject agree that the standard examination of right angles, which is anterior-posterior and lateral, must certainly be augmented by a number of other examinations. These would include oblique examinations, which are important because they demonstrate the important intervertebral foramen where the cervical nerves make their exit. Also, examinations are performed in flexion and possibly in extension, because these patients could have definite disease which cannot be shown when they are sitting or standing with the neck in a neutral position.

The most common finding in the cervical spine from whiplash injuries has been mentioned, that is, a loss of the normal curvature. It is not truly a bone injury; it is muscle reaction of spasm that results in a straight cervical spine. There may be additional injuries, such as fractures of the cartilage of the facets or hemorrhage into some of the joints, but these are not usually visible. The most common finding, then, is the loss of the usual curvature.

The second most common finding of whiplash injury is fracture of the spinous processes, usually the lower ones. These are caused, not by direct violence, but by muscle pull which is immediate and which is extensive.

Probably the third most common finding is dislocation. What constitutes a dislocation of the neck is a problem which is not entirely agreed upon at the present time. Dislocation sounds like a simple problem, but it becomes complex.

If one flexes the neck forward of a normal uninjured person and then makes a lateral x-ray examination, many times one will see the vertebral segments glide forward a few millimeters upon each other. Usually the gliding motion is most pronounced between the 4th and 5th segments. If this patient has a whiplash injury and one takes a similar film, one can see the same findings. In the minds of some authorities that constitutes a minor degree of subluxation. They are probably labeling a normal variation a minor degree of dislocation (fig. 2). At times, the patient will have obvious anterior gliding motion of at least 4 to 5 millimeters or more, and does not show this finding in the neutral lateral position; this degree of anterior displacement would represent dislocation. Therefore, flexion and possibly extension examinations are important to establish the variation of normal sliding motion of the vertebrae from dislocation.

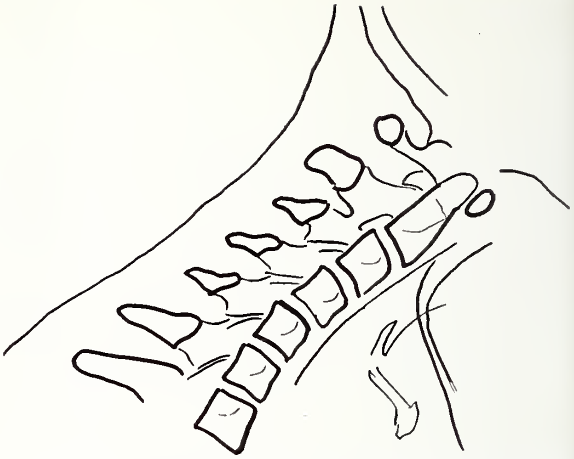

Fig. 2. Tracing of roentgenogram: Lateral view with flexion. The normal anterior gliding motion that exists is in evidence. The slight increase in the gliding motion between segments C_4 and C_5 is normal. Beyond 4 or 5 millimeters is considered excessive, representing dislocation.

A less common finding is fractures of the body of the vertebral segments; still less frequent are fractures of the facets.

So much for the x-ray findings that exist from the whiplash injury. However, most people who have whiplash injuries are above 30 years of age and a significant number are above 40 and 50 years. Many of these people have disease of their neck prior to injury. They may have degenerative changes present. The second most important reason for x-ray examination, then, is to establish what bony conditions existed before injury. The most common forms of disease, of course, are degenerative changes in which the cartilage narrows, the disk narrows, spurs form, the vertebral segments have loss of mobility and the important intervertebral foramen become encroached.

Figure 3 is a flexion examination in a 60 year old person with minimal neck complaints. The x-ray shows that the lower cervical segments have a complete loss of motion; they are fixed. This loss can be demonstrated by the superimposing of x-rays of flexion and extension. Nothing can move these segments. Most of the motion in this patient's cervical spine exists between the 5th and 6th segments. If this patient were in an automobile rammed from behind causing his neck to snap, most of the motion would be between the 5th and 6th segments. This older patient could have severe symptoms from a minute injury because there are only few places in his neck that can absorb the amount of force given to him from the injury. The examination that establishes the presence of disease prior to injury is valuable as the findings that one sees here indicate. Degenerative changes, for example, could not occur from the injury a day or an hour before. They are all many years in production and of many years duration.

Figure 4 is probably one of the most significant

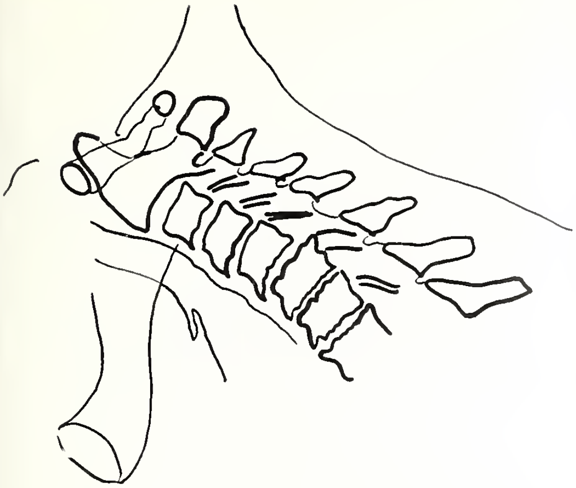

Fig. 3. Tracing of roentgenogram: Lateral view with flexion. The degenerative changes in a symptomatic 60 year old male patient is manifested by spur formation on the margins of the vertebral bodies, and narrowing of intervertebral spaces. The lower cervical segments have no motion, and excessive motion exists between the 5th and 6th segments. In this type of patient, a whiplash injury of the neck would have much of the force absorbed in the supporting ligaments between the 5th and 6th cervical vertebrae.

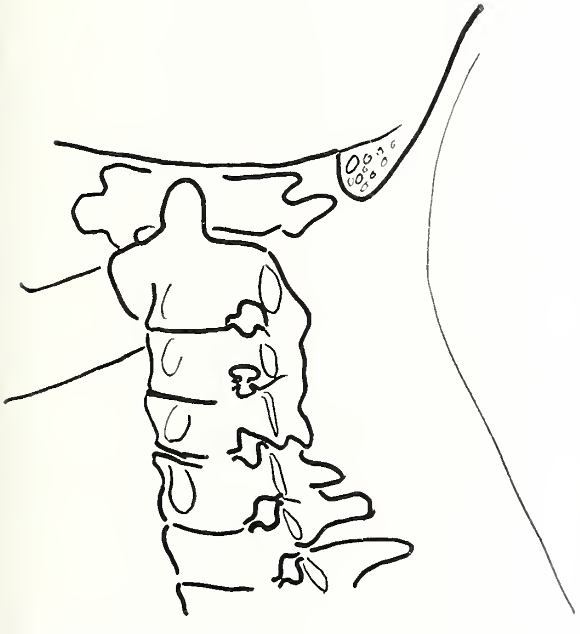

Figure 4. Tracing of roentgenogram: Oblique view. Intervertebral foramen are demonstrated. The foramen between the 3rd and 4th vertebrae is encroached by spurs from the lateral intervertebral joint and the apophyseal joint. The cervical nerve in this foramen has a minimal amount of tolerance. Further narrowing of the foramen by whiplash injury or by subsequent edema could cause nerve irritation and produce the cervical syndrome.

things that can be shown because the important problem called cervical syndrome which was mentioned before refers to cervical nerve root irritation. It is produced by nerve pressure at the exit from the spine. This figure illustrates an oblique view of the cervical spine showing the important intervertebral foramen. Half of the foramen is from the segment above and half from the segment below. This individual has spurs encroaching the foramen. These spurs arise from the lateral intervertebral joints and also from the apophyseal joints. In an asymptomatic, or a relatively normal person at the age of 70, the nerve in this foramen can be compressed slowly and become flattened and still the patient has no symptoms. There is hardly any tolerance between the size of the foramen and the nerve that is in it. If this individual were in an automobile, and it was rammed, causing his neck to snap, a minute amount of trauma can give this patient a maximum amount of symptoms. But, this condition can never be established unless actual oblique views are taken of the cervical spine. These views are not always easy to obtain. The exact degree of rotation depends upon his individual neck structure. One just cannot assume an automatic rotation of 45 or 35 degrees. But this examination establishes an important fact: that there is disease before injury, and, that the injury may be aggravating the existing disease because the injury alone could not cause all of the symptoms.

A small number of patients have congenital anomalies of the neck. These people also have a lack of motion in their neck which can be aggravated by injury.

The late changes that show up on x-ray from whiplash injury are loss of the intervertebral space that can occur from disk degeneration over a period of years. The second late change, never to be forgotten, is the fact that these people can fracture their cervical vertebrae and one cannot see it at the time of injury. A year later, they can have a compression of a vertebral body or an actual ununited fracture which exists in an apophyseal joint. These findings may be seen only on a series of progressive examinations and cannot be found the first time.

TREATMENT

DONALD O. BURST, M.D.: First, I make a plea for the terminology. "Whiplash Injury" should be dismissed as a diagnosis. I suggest "cervical sprain" which is, really, what one is dealing with. "Whiplash" tells the mechanism and not much more except that it opens the door for litigation. This may be perfectly proper and necessary but the term has been abused. Therefore, I ask that doctors stop the use of the term "whiplash" and refer to the real pathology, which is a tear of the ligaments or a "sprain."

Several men have stated that they have not seen fractures with this type of injury. I have seen an anterior body compression and this takes a pretty severe blow. I have, also, seen the spinous process of one of the lower cervical vertebrae fractured at its base.

I want to convey the idea of a positive approach to treatment—positive in the sense that one can convince the patient that he will get well from a cervical sprain injury. I know that some people have trouble for a long time but, I believe, they will all get well sooner or later.

Probably the oldest form for this condition is heat and massage. The idea, of course, is that heat will increase the blood supply. Excess heat, however, does aggravate many of these people. I do not believe that continuous heat, wet or dry, should be used. Heat is supposed to relieve the muscle spasm which is real in many of these conditions—it can be felt and it may produce a torticollis. Many times one sees straightening of the normal lordotic cervical curve which may indicate muscle spasm—it does not always. One must be careful about prolonged or excessive use of any diathermy type heat as you can, actually, "bake" a neck just like a shoulder. There is real destruction with prolonged deep wave (not infra red) therapy.

The treatment must fit the patient. There are many approaches. One must try to find a localized tender spot. One does not have to go to the nerve root, only the most tender spot. One may use 0.5 per cent or 0.1 per cent procaine. It is wise to give a barbiturate 30 minutes before which will, practically, eliminate a severe novocaine reaction which is a real thing. Two per cent can be fatal if injected directly into the blood stream. I think we agree that most of the pathology is around the nerve root but not in it, so the injection should be into the area but not into the root.

I do not know that I have ever seen a proven herniated intervertebral disk from a cervical sprain. In fact, I have not seen a ruptured cervical disk from any cause for many years.

Traction is a good form of treatment for cervical sprain. There are various forms of traction. Traction does several things. One thing is that it immobilizes both the neck and the patient. An acutely ill patient is best treated by continuous head halter traction in the hospital. Use three to five pounds of traction with the head of the bed elevated to 30 to 35 degrees and keep the line of pull in the same axis as the elevated trunk and head of the patient. Do not hyperextend the neck. Use some sedation for at least the first few days. The tranquilizing drugs are good and, in fact, they may be the only instrument really needed in the first place. Traction may be set up at home. The physiotherapy departments and the surgical supply houses will supply the equipment and the instructions. There is a "tractalator," an intermittent form of traction which some people think is the best. A small pillow may or may not be used depending upon the individual doctor's opinion.

Thomas collars, I think, do their job by immobilization. Do not hyperextend the neck with a collar. There is no need to do so and, in fact, it will aggravate some injuries. Felt collars can be made by cutting a 3 to 4 foot long strip of felt on a bias, 2 inches at one end to about 4 inches on the other. Then insert into stockinette and wrap the neck around and around, beginning with the small end next to the neck. Plastic (ready made) collars are fairly satisfactory but a good deal more expensive. There are, also, braces for the neck but, I believe, they are superfluous for cervical sprains.

Posture may play some part; good posture is good at any time. Some people use figure-of-eight strappings to keep the shoulders back. I have had no experience with that.

The muscle relaxants are used frequently. They must do some good but I have not had success with them and I do not use them any longer.

Vitamins and large doses of B_{12} are frequently used with success. A colleague of mine states that he has some measure of success with injections (locally) of cortisone derivatives. This, I believe, is highly debatable.

Psychosomatic care, in itself, is something that must be considered in every patient with a cervical sprain. Any person who is nervous has a much more rocky course with cervical sprains. There is no question but that a nervous type person, who has some pain, has it exaggerated by being tired or upset. So the psychosomatic aspect of this entity cannot be over emphasized and it is up to the individual doctor to decide on how thoroughly he should treat this aspect in each patient.

Dr. Lottes: I certainly agree with Dr. Burst's treatments and also with the idea of eliminating the term "whiplash," but I am afraid it is a losing battle.

Some men have gone so far as to say there is a tear of the supraspinous ligament, the interspinous ligament, the ligamentum flava or the posterior longitudinal ligament. Now, how is one going to tell what is torn unless one exposes the area surgically? I cannot say whether they are right or wrong about the tears because I have never seen a patient with the neck exposed. One can see an x-ray picture of a fracture, but one surely cannot see a torn ligament.

The big thing about these people, I think, and Dr. Burst put it well, is to assure the patient that this condition is primarily self-limited, that they may be miserable for awhile, aggravated for a little bit longer, but eventually they will be asymptomatic. One must also consider the whole welfare of the patient; the patient's mental attitude, the economics at home, the irritations they have from living under pressure. One has to treat the patient as a complete entity and not as an injured neck.

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SEARLE

Case Report

Congenital Hypertrophic Pyloric Stenosis In Identical Twins

ALFRED E. McDERMOTT, M.D., *Perryville*

Congenial or infantile hypertrophic pyloric stenosis in both identical twins is so infrequent that one feels obligated to report such a phenomenon.

I delivered this set of full term Caucasian female, identical twins on September 17, 1958, at the Perry County Memorial Hospital. The delivery was essentially normal. The first infant weighing 6 pounds, 5½ ounces, presented and was delivered, in the breech position. The second girl weighed 6 pounds, ½ ounce, and delivered in a cephalic position. A single chorionic membrane surrounding separate amnionic sacs and fused placentae was demonstrated.

The postpartum course was uneventful. The mother supplied the infants with an adequate amount of breast milk.

When the older girl was 20 days old she began intermittent postprandial vomiting for 24 hours before being seen by me. Since no cause, other than a possible stenosis of the pylorus, could be found, she was hospitalized to rule out this disorder.

Tremendous dilation of the air filled stomach with little air in the small or large intestine was seen on the x-ray of the abdomen. Intramuscular atropine and oral thickened feedings were started. The vomiting became increasingly more projectile, with the episodes occurring 15 to 90 minutes after each feeding. No bile or blood was noted in the vomitus. Gastric peristaltic waves and a tumor mass at the pylorus were easily demonstrated 40 hours after hospitalization. Dehydration and electrolyte disturbances were prevented by subcutaneous infusions. On the fifth day after onset of symptoms, surgery was performed.

The classical findings of an elongated and thickened pylorus of cartilagenous consistency were present. The stomach was markedly dilated and the lumen of the pylorus was completely closed. The circular muscles of the pylorus were two to three times their usual thickness.

The younger twin girl began having similar symptoms and signs of obstruction six days after they had begun in the older twin. Almost identical x-ray findings were demonstrated. When she was operated upon, five days after the other child, similar classical findings of pyloric hypertrophy and obstruction were noted. The same surgical procedure was again performed.

The Fredet-Rammstedt operation on both twins was performed by Dr. Wm. F. Utterman, of Perryville, Mo.

The postoperative course of both twins was uneventful. They both did well on breast feedings after surgery.

It is interesting to note that the mother of these identical twin girls is, herself, an identical twin. There is no history of similar pyloric obstruction in either parent's family. The girls are the first born to the couple.

A review of medical literature reveals that this is the thirteenth reported case of congenital hypertrophic pyloric stenosis occurring in both of a set of identical twins.

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MASS CASUALTY CARE TRAINING SHOWN

Military and medical preparedness for the care of mass casualties in case of war will be featured at the seventh annual National Civil Defense Conference on June 6 in Atlantic City.

"The one-day program will highlight medical problems involved in nuclear warfare," said Dr. Harold C. Lueth, Evanston, Ill., chairman of the A.M.A. Committee on Disaster Medical Care. "The program, unique since it will be presented entirely by the Army Medical Service, will dramatize the important fact that the medical and health professions can take positive action to minimize the impact of mass casualties if properly trained and organized," Dr. Lueth said. Dr. Louis M. Orr, Orlando, Fla., President-elect of the A.M.A., will open the conference.

The general methods of instruction for these courses, already attended by 6,000 students who were either military personnel or civilians, include lectures, student participation through practical exercises, group and panel discussions, visual aids and manikin demonstrutions. Currently, the courses are being given at Walter Reed Army Medical Center, Washington, D. C., and Brooke Army Medical Center, San Antonio, Texas.

new for total management of itching,[1,2] inflamed,[3,4] infected[5,6] skin lesions

Mycolog

Kenalog, Spectrocin and Mycostatin in Plastibase

ointment

antipruritic/anti-inflammatory/antibacterial/antifungal

Mycolog Ointment – containing the new superior topical corticoid Kenalog – reduces inflammation,[3,4] relieves itching,[1,2] and combats or prevents bacterial, monilial and mixed infections.[5-7] It is extremely well tolerated, and assures a rapid, decisive clinical response for most infected dermatoses.

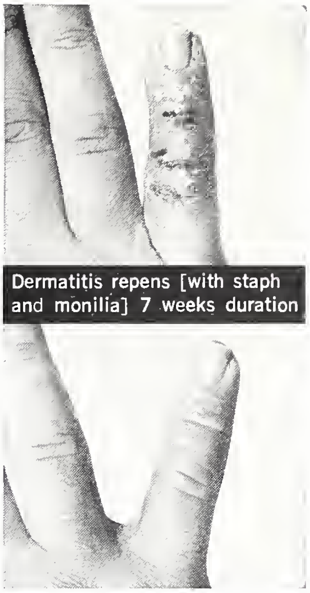
> "Thirty-one of 38 patients . . . obtained excellent or good control of dermatological lesions . . . [Mycolog] was highly effective, particularly in the management of mixed infections. Several recalcitrant eruptions which had not responded to previous therapy were remarkably responsive to the daily application of this preparation over periods of 2 to 3 weeks."[5]

For total management of itching, inflamed, infected skin lesions, Mycolog contains triamcinolone acetonide, an outstanding new topical corticoid for prompt, effective relief of itching, burning and inflammation[1-4] – neomycin and gramicidin for powerful antibacterial action[7] – and nystatin for treating or preventing Candida (Monilia) albicans infections.[8,9]

Application: Apply 2 to 3 times daily. Supply: 5 Gm. and 15 Gm. tubes. Each gram supplies 1.0 mg. (0.1%) triamcinolone acetonide, 2.5 mg. neomycin base, 0.25 mg. gramicidin, and 100,000 units nystatin in PLASTIBASE.

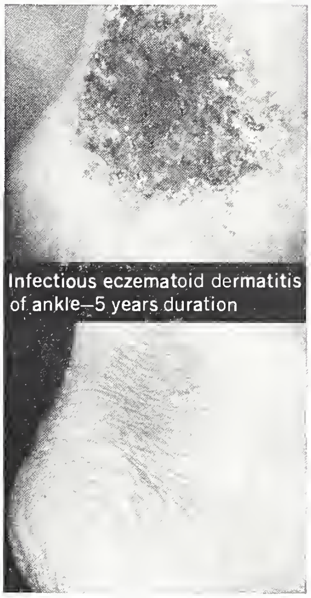
References: 1. Shelmire, J.B., Jr.: Monographs on Therapy 3:164 (Nov.) 1958. • 2. Nix, T.E., Jr., and Derbes, V.J.: Monographs on Therapy 3:123 (Nov.) 1958. • 3. Robinson, R.C.V.: Bull. School of Med., U. Maryland 43:54 (July) 1958. • 4. Sternberg, T.H.: Newcomer, V.D., and Reisner, R.M.: Monographs on Therapy 3:115 (Nov.) 1958. • 5. Clark, R.F., and Hallett, J.J.: Monographs on Therapy, 3:153 (Nov.) 1958. • 6. Smith J.G., Jr.; Zawisza, R.J., and Blank, H.: Monographs on Therapy, 3:111 (Nov.) 1958. • 7. Monographs on Therapy, 3:137 (Nov.) 1958. • 8. Howell, C.M., Jr.: North Carolina M.J. 19:449 (Oct.) 1958. • 9. Bereston, E.S.: South. M.J. 50:547 (April) 1957.

And whatever the topical corticoid need, a suitable Squibb formulation is available—Kenalog-S Lotion—7½ cc. plastic squeeze bottles. Each cc. supplies 1.0 mg. (0.1%) triamcinolone acetonide, 2.5 mg. neomycin base and 0.25 mg. gramicidin. Kenalog Cream, 0.1%—5 Gm. and 15 Gm. tubes. Kenalog Lotion, 0.1%—15 cc. plastic squeeze bottles. Kenalog Ointment, 0.1%—5 Gm. and 15 Gm. tubes.



Dermatitis repens [with staph and monilia] 7 weeks duration

Cleared in 5 days



Infectious eczematoid dermatitis of ankle—5 years duration

Cleared in 20 days

SQUIBB

Squibb Quality — the Priceless Ingredient

'SPECTROCIN'®, 'MYCOSTATIN'®, 'PLASTIBASE'®, 'MYCOLOG' AND 'KENALOG' ARE SQUIBB TRADEMARKS

President's Page

Many problems face the medical profession today, and, indeed, the world. Probably the most common use of the word "problem" today is used in the phrase "Problems of the Aging." There have been conferences on this subject at the A.M.A. level and a meeting has been called for June 12 and 13 in Washington, just following the A.M.A. session, of the Joint Council to Improve the Health Care of the Aged. This will be attended by the President, the Executive Secretary and a member of the newly created Committee on Aging, established at the recent MSMA session.

Ralph Perry, M.D.

These conferences become more practical all the time and the present scheduled one promises to be of much value. It recognizes that health care includes medical care but that medical care ties in with many other aspects, in fact, depends upon them for full attention that this rapidly growing portion of our population will need.

The conference, which will be reported on at a later date, is sponsored by the American Dental Association, the American Hospital Association, the American Medical Association and the American Nursing Home Association.

Symposia forming the program are "What Is a Realistic Attitude Toward the Aged," "Methods of Financing Health Care of the Aged," "Assessing Community Health Needs and Resources of the Aged," and "Programs for Health Care of the Aged."

Ralph Perry

EDITORIALS

Traffic Accidents

Excessive speed was by far the greatest single cause of traffic accidents which caused more than 2,825,000 injuries and 36,700 deaths on the nation's highways during 1959, according to the Travelers Insurance Company in its latest highway safety booklet.

It was estimated that speed killed and injured nearly 1,000,000 persons in the United States last year, more than 40 per cent of the total.

Cars that did not have the right-of-way were involved in 25.2 per cent of the accidents, causing a total of 608,400 injuries during the year. Reckless driving was blamed for 10.4 per cent of the injuries; cutting-in accounted for 4 per cent and improper signaling for 3.6 per cent.

Of the 7,700 pedestrians killed and 254,800 injured, crossing at intersections was the chief cause. Accidents to pedestrians crossing at intersections accounted for 10.1 per cent, or 27,040 injuries, as compared with 7.4 per cent injuried crossing against the signal.

Other statistics reported were that 97.1 per cent of drivers involved in fatal accidents had more than a year of driving experience; that 87.9 per cent of drivers involved in fatal accidents were men, that 87 per cent of the vehicles in nonfatal accidents were passenger cars, and that more than 95 per cent of the cars involved were in apparently good condition at the time of the accident.

Dry roads prevailed in 78.3 per cent of the fatal crashes and 70.1 per cent of the nonfatal accidents. The weather was reported as clear in 84.2 per cent of the fatal accidents and 79.5 per cent of the nonfatal ones.

Aging Not Always a Problem

With so much being studied, written and said about the difficulties of the aging population, Senator Theodore F. Green of Rhode Island stands out as an example that it need not be so. Senator Green is 91 years old, the oldest man ever to serve in Congress.

An interview with Senator Green is carried in a recent issue of *Today's Health*. He has a prescription for his maintained activity—moderation and exercise.

Senator Green in the interview said: "Too many people give up and quit just as they are entering their prime. . . . I never rest but I do relax. I don't get worried. I don't get excited. I laugh a lot. A good way to keep fit is to remain active. I try to do a variety of things—that's what keeps you interested."

With all that is being done, Senator Green's interview would seem to indicate that the persons being studied could help to a great extent.

A.M.A. 108th Annual Meeting

The A.M.A. goes back to Atlantic City for its 108th Annual Meeting, its last one there being in 1955. The A.M.A. reports that housing facilities have been increased since that time and that late decision to attend should not deter the physician from attending this session. The Convention Services Department, American Medical Association, 535 N. Dearborn St., Chicago 10, Ill., will furnish information about hotels and motels in Atlantic City.

Some 450 physicians will present scientific papers or participate in panel discussions and symposia during the meeting. Hypnosis, staphylococcal infections, blood cell disorders, space medicine, European spas, and aging are among the subjects to be considered. There will be 387 scientific exhibits shown by physicians and 285 industrial exhibits presented by pharmaceutical and medical equipment firms and other business organizations.

Seven of the 21 sections of the scientific assembly will mark their 100th anniversaries during the meeting. They are sections on surgery, internal medicine, obstetrics and gynecology, experimental medicine and therapeutics, pathology and physiology, nervous and mental diseases, and preventive medicine.

The House of Delegates, composed of 210 members, will meet throughout the week in the Traymore Hotel.

Louis M. Orr, M.D., Orlando, Florida, will be inaugurated president of the A.M.A. on Tuesday evening. The inaugural will be followed by a reception and ball.

Atlantic City, the site of the annual meeting, began as a doctor's dream of a health resort. In 1852, when Atlantic City was called Absecon Beach, Dr. Jonathon Pitney, who had a thriving practice in the community, saw the advantages of the beach as a health resort. At the same time, a glass manufacturer wanted a railroad to carry his wares. The two men sold businessmen in the area on the advantages of a railroad to the island. Once the railroad was built, a real estate boom occurred. Hotels were built, the town's name was changed to Atlantic City, and the seashore resort was on its way.

News—Personal and Professional

The Four Scope Society of X-Ray Technicians, Joplin, were addressed by **W. W. Hurst,** M.D., Joplin, recently on "The Evaluation of Cervical Spine."

An illustrated talk was presented at St. John's United Church of Christ, St. Louis, by **Alfred Baur,** M.D., Fulton, early in March.

J. M. Martt, M.D., Columbia, has been notified that he has been certified by the American Board of Cardiovascular Disease, a subspecialty board of the American Board of Internal Medicine.

The Catholic Hospital Association sponsored a luncheon in honor of **LeRoy Sante,** M.D., St. Louis, commemorating thirty-five years of service to St. Louis University School of Medicine and the St. Mary's group of hospitals on April 3.

The American College of Obstetricians and Gynecologists elected **A. N. Arneson,** M.D., St. Louis, as treasurer at a meeting in April.

Serving on a liaison committee to draw up a code governing areas of the legal and medical professions in Boone County were Drs. **Eugene Windmiller, M. Pinson Neal, Horace E. Allen, Glen L. McElroy** and **William B. See.**

The following officers were elected by the staff of St. Joseph's Hospital, Kansas City: President, **John A. Growdon,** M.D.; president-elect, **W. W. Gist,** M.D.; secretary, **H. E. Linville,** M.D., and treasurer, **H. H. Virden,** M.D.

The Dairy Council of St. Louis at its annual meeting early in April elected **James P. King,** M.D., St. Louis, president.

H. C. Willumsen, M.D., St. Joseph, served on a panel on mental health which was presented by the St. Joseph Mental Health Association in St. Joseph.

At a meeting in Richmond sponsored by several PTA organizations, **John J. O'Hearne,** M.D., Kansas City, was the speaker.

Following a film on cancer, **F. L. Kozal,** M.D., Festus, answered questions from the audience at a meeting for men in Festus early in March.

The Board of Religious Organizations, at a meeting in Webster Groves in March, had **Joseph P. Costello,** M.D., St. Louis, as a speaker at the luncheon session. His subject was "The Aging Individual and the Years of Decision."

Guest speaker at a meeting in March of the Lebanon Business and Professional Women's Club was **James R. Amos,** M.D., Springfield.

Following a film on cancer in Carterville in March, **John E. Burch,** M.D., Joplin, presided at a question and answer session.

The Cape Girardeau Medical Assistants and Secretaries Society had as speaker at a recent meeting **J. H. Keim,** M.D., Cape Girardeau. He spoke on "Diabetes."

"Diet and Drugs in the Treatment of Diabetes" was the subject of a talk presented by **Thomas W. Burns,** M.D., Columbia, at a public educational meeting in Kansas City on March 10.

At an American Cancer Society press dinner in Joplin, **Albert E. Upsher,** M.D., Kansas City, was the guest speaker.

"The Treatment of Burns by Skin Grafting" was the subject of a talk presented by **J. A. Ossman,** M.D., Jefferson City, at a meeting of the Registered Nurses' organization meeting in Jefferson City.

The hospital's economic value to a community was discussed by **R. Lee Cooper,** M.D., Boonville, at a recent meeting of the Boonville Rotary Club.

Ellen S. Loeffel, M.D., St. Louis, was installed as president of the Zonta Club of St. Louis at a meeting on May 7.

The Central Missouri Dietetics Association had as speaker at a meeting late in March **Walter R. Hepner,** M.D., Columbia. He spoke on "Some Problems in Understanding Growth."

The *Neosho News* carried an editorial on March 26 concerning the retirement of **Paul C. Davis**, M.D., Neosho, who announced he would retire within the next month.

The Friendly Neighbors' Club of Joplin was addressed by **Donal E. Barlow**, M.D., Joplin, at a recent meeting. He discussed cancer.

The impact of personality on business dealings was discussed by **E. H. Trowbridge**, M.D., Kansas City, before members of the Real Estate Board of Kansas City at a March meeting.

The Greater St. Louis Society of Radiologists recently elected **Thomas F. Maher**, M.D., St. Louis, as president. **Charles J. Cherre**, M.D., was elected vice president, and **Harvey A. Humphrey**, M.D., was elected secretary-treasurer.

"Children's Mental Health" was discussed by **Mauricio Knobel**, M.D., Kansas City, before a group at St. Andrews Episcopal Church, Kansas City, on April 5.

On April 1, **Pat A. Barelli**, M.D., Kansas City, gave a talk on "Stapes Mobilization" at the Mid West Conference of Medical Record Librarians in Kansas City.

John S. Knight, M.D., Kansas City, presented a paper on "Post-Laryngectomy Care in the Middle West" at a meeting of the International Congress of Broncho-Esophagology in Mexico City in March.

The Association of American Physicians and Surgeons elected **Thomas L. Dwyer**, M.D., Mexico, as treasurer at a meeting held early in April at Fort Worth, Texas.

C. Howe Eller, M.D., formerly of Louisville, has been appointed Health commissioner of St. Louis County.

Jack W. Wolf, M.D., Kansas City, was one of four persons with birthdays the same week, who entered in the celebration of his 70th birthday by Thomas Hart Benton.

The Southwestern Surgical Congress, meeting in Denver in early April, elected **Claude J. Hunt**, M.D., Kansas City, as secretary-treasurer.

George J. L. Wulff, Jr., M.D., St. Louis, was elected president of the St. Louis Gynecological Society, at an April meeting. **Roy Boedeker**, M.D., was elected vice president; **Bryce Bondurant**, M.D., was elected secretary, and **A. C. Trueblood**, M.D., treasurer.

The Austrian Dermatological Society has notified **Ernest Spitzer**, M.D., St. Louis, that he has been elected an honor member of the society.

The medical staff of Jewish Hospital, St. Louis, recently elected **David Rothman**, M.D., as president. Other officers elected are **Norman Orgel**, M.D., vice president; **Martin Bergmann**, M.D., secretary, and **Robert Burstein**, M.D., treasurer.

The Menorah Medical Center, Kansas City, elected officers for 1959-60 at an annual meeting in April. Officers are **Harold Passman**, M.D., president; **Bela Kent, M.D.**, president-elect; **David Waxman**, M.D., secretary, and **Alexander Lichtor**, M.D., treasurer.

H. H. Virden, M.D., recently spoke on the uses of x-ray, radium and radioactive materials in the field of medicine at a meeting of the Society of Non-Destructive Testing at the Trans-World Airlines Repair Depot in North Kansas City.

"You Are a Woman, Also" was the subject of a talk given by **Louis Forman**, M.D., Kansas City, before the Women's Chamber of Commerce in Kansas City on April 7.

New officers of the St. Louis Orthopedic Society elected at a recent meeting are **Irwin Horwitz**, M.D., president; **Otto Lottes**, M.D., vice president, and **Richard E. Lord**, M.D., secretary-treasurer.

The Missouri Surgical Society elected **J. William Thompson**, M.D., St. Louis, as president at an April meeting in Kansas City.

"The Establishment of the Triage System" was the subject of an address presented by **Oscar P. Hampton**, M.D., University City, before the Ohio State Medical Association meeting on April 23.

Dillard M. Eubank, M.D., Raytown, was elected chairman of a newly organized Medical Council of the Metropolitan Area of Greater Kansas City.

The staff of the Bothwell Hospital, Sedalia, in a recent election named **P. V. Siegel**, M.D., Smithton,

Musings of the Field Secretary

There were 278 people registered at the Second Missouri Conference on the Handicapped, held at the Hotel President, Kansas City, April 3 and 4, 1959.

The theme of the conference was "Help for the Multiple Handicapped." The principle objectives were, (1) to point out needs of the multiple handicapped in Missouri and (2) to recommend improvements in services. Visits to four outstanding institutions in Kansas City furnishing aid to multiple handicapped children and adults were made as a part of the two-day program. Group discussions and talks by experts working in this field supplemented the visits. The conference was jointly sponsored by the Missouri Health Council and the Nemours Foundation of Delaware.

The Middle Mississippi Valley Regional Conference on Aging was held in St. Louis at the Statler Hotel, April 15-17. Business leaders, doctors, educators, municipal officials and social workers from St. Louis and other cities appeared on the program either at the general sessions or at the workshops. Subjects of the five workshops were: (1) How to Establish Community Programs, (2) Toward Independent Living, (3) Housing and Living Arrangements, (4) Administering Nonprofit Shelter Care Facilities, and (5) Employment and Retirement. The states included in the conference were Iowa, Illinois, Kansas, Kentucky, Missouri, Nebraska and Oklahoma. The number of physicians in attendance was small although it appears that doctors are having considerable to do with more and more folks living to later years.

In attending a county medical society meeting recently I was privileged to hear a clear, well organized, comprehensive report on the deliberations of the Missouri State Medical Association House of Delegates Sessions in Kansas City, April 5-8.

This was given by a delegate from the society who certainly was on the job during the entire annual meeting and was aware of the problems and their ramifications which were considered. The members of his society hearing this report must feel that their society was well represented. They were also urged to make it their individual business to become informed on the major problems confronting the private practice of medicine.

The last two seniors of this year's graduating class at the University of Missouri Medical School, who selected preceptorship training, began their six-weeks tours of duty, April 15. Albert Perras, Webb City, is with William R. Richardson, M.D., Union, and John E. Plumlee, Springfield, is at Liberty with S. O. Schroeder, M.D. Of the 30 graduating this June from the University School of Medicine, ten chose preceptorship training as an elective in their course of study.

Internship appointments have been received by all 30 seniors with ten of the appointments to Missouri hospitals.

The graduating class of 1959-60 will number more than 60 and will require between January 1, 1960 and June 1, 1960, the cooperation of some 20 to 25 preceptors, providing the ratio of those selecting the training follows this year's pattern.

News—Continued

as chief of staff; **J. W. Boger**, M.D., vice chief of staff; **A. J. Campbell**, M.D., secretary-treasurer. Elected to the executive committee were **C. G. Stauffacher**, M.D., and **A. L. Walter**, M.D.

Joseph E. Flynn, M.D., Columbia, has been appointed chairman of a medical education committee of the Leukemia Guilds of Missouri and Illinois.

"The Unusual Child" was discussed by **C. T. Herbert**, M.D., Cape Girardeau, at a club meeting in Chaffee in April.

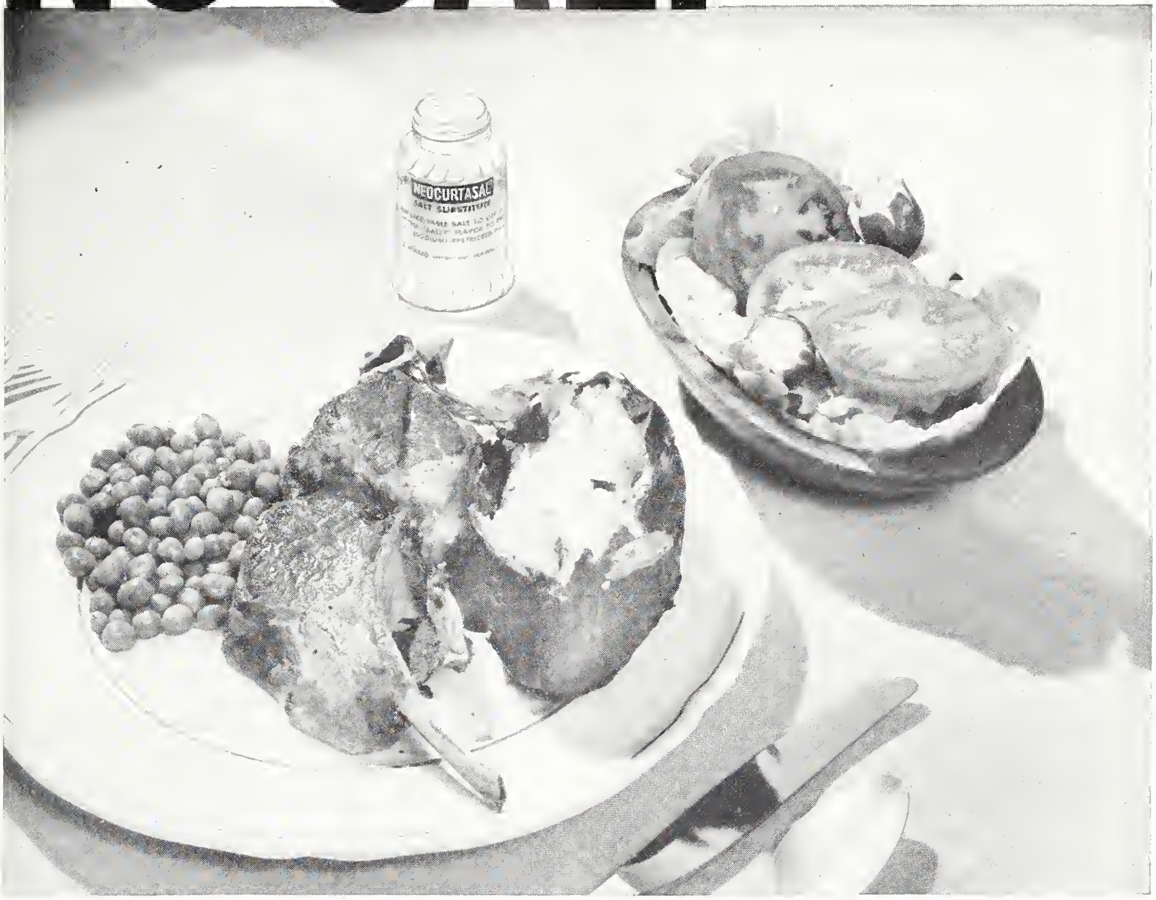
The University of Missouri Medical School Alumni Association elected **John W. McHaney**, M.D., Jefferson City, as its president at a meeting in Kansas City on April 7. **Hugh E. Stephenson**, M.D., Columbia, was elected secretary-treasurer. **Thomas H. Burford**, M.D., St. Louis, was elected first vice president, and **Wallace R. Stacey**, M.D., Independence, second vice president.

The University of Missouri Chapter of Phi Beta Pi Medical Fraternity honored **Fred B. Kyger**, M.D., Kansas City, with the presentation of a pin as a 50 year member at a meeting in Kansas City on March 28.

A distinguished service award of the Department of Health, Education and Welfare has been presented to **Addison M. Duval**, M.D., Jefferson City, "for outstanding contribution to the administration of St. Elizabeth's Hospital and for exceptional service in the field of mental health to the metropolitan community of Washington (D.C.)."

E. H. Trowbridge, M.D., Kansas City, spoke before the students of Shawnee Missouri East High School in Kansas City on "Medicine as a Career" on April 13.

NO SALT *..but seasoned*



A meal of even the most colorful and the most meticulously prepared food can be dreary eating without salt. Neocurtasal, for the patient on a low-sodium diet, brings back flavor to foods—makes eating a pleasure once more.

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"Salt-Free" (Low Sodium) Diets

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Assures patient's cooperation

Contains potassium chloride, potassium glutamate, glutamic acid, calcium silicate, potassium iodide (0.01%).

2 oz. shakers and
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Councilor District News

FIRST COUNCILOR DISTRICT

DONALD M. DOWELL, CHILLICOTHE, COUNCILOR

Grand River Medical Society

The Grand River Medical Society met, Thursday, April 9, at the Strand Hotel in Chillicothe. There was a good attendance of members, Auxiliary members and guests.

After a pleasant social hour, followed by dinner, the Auxiliary withdrew to a special meeting of their own.

The scientific speaker of the evening was Dr. Stoughton F. White, urologist of Kansas City, who spoke on the subject of "Office Urology." His address was well received and was followed by an interesting discussion period.

The meeting concluded with a short business session and adjourned at 10:30 p.m.

Wm. A. Fuson, M.D., *Acting Secretary*

SECOND COUNCILOR DISTRICT

J. J. WIMP, KIRKSVILLE, COUNCILOR

Chariton-Macon-Monroe-Randolph

A dinner meeting of the Chariton-Macon-Monroe-Randolph County Medical Society was held at the Woodland Hospital in Moberly on Thursday night, April 9. The speaker for the evening was Dr. E. C. Chiasson, Columbia, Mo., psychiatrist, and who also serves as a consultant for the state mental institutions. She used as her subject, "The Mental Health Program in Missouri —Present and Future."

Dr. Chiasson emphasized that Missouri is quite fortunate to have recently secured Dr. Addison Duvall to head the state Division of Mental Health, and Dr. Lewis Bellinson to assist him. She outlined vividly the main problems facing the State of Missouri in regard to an adequate mental health program. She pointed out that Missouri's per capita wealth is 21st in the nation, and 44th in tax expenditures for mental health programs. Dr. Chiasson cited many examples of overcrowded conditions, lack of equipment and supplies, and the patient-personnel ratio in our state mental institutions. One of the big problems in this state, emphasized Dr. Chiasson, has to do with lack of facilities for mentally defective children as well as lack of provisions for the care of the disturbed child.

The following were present: Drs. Eugene Arnold, Josephine Baker, C. C. Cohrs, J. W. Fleming, Jr., T. S. Fleming, R. M. Hasson, L. E. Huber, C. C. Smith, A. P. Rowlette, S. R. Szymanski and R. H. Young, Moberly; C. C. Weger, Keytesville; P. V. Dreyer, Huntsville, and G. W. Hawkins, Salisbury.

Josephine Baker, M.D., *Secretary*

Marion-Ralls-Shelby County Medical Society

The Marion-Ralls-Shelby County Medical Society met for dinner at the Mark Twain Hotel in Hannibal Tuesday night, April 21. The evening festivities began with a social hour followed by dinner and the program. The scientific program was sponsored by the Missouri Academy of General Practice in cooperation with St. Louis University School of Medicine and presented a panel discussion on "Special Surgical Problems in Pediatrics, Including Diagnosis, Treatment and Supportive Care."

The discussion continued after the formal presentation.

The panel members were: James King, M.D., Chief of Pediatrics; James E. Lewis, Chief of Surgery; Armand Brodeur, Chief of Radiology, all at Cardinal Glennon Memorial Hospital, St. Louis.

Twenty-five physicians were in attendance to hear this informative discussion.

John H. Walterscheid, M.D., *Secretary*

FOURTH COUNCILOR DISTRICT

PAUL R. WHITENER, ST. LOUIS, COUNCILOR

Lincoln-St. Charles County Medical Society

On Thursday night, April 30, a dinner meeting of the Lincoln-St. Charles County Medical Society was held at the Southern Air in Wentzville. Following an enjoyable social hour and dinner, those in attendance were privileged to hear Harold M. Cutler, M.D., St. Louis, speak on, "The Manage-

Dr. Cutler was the speaker.

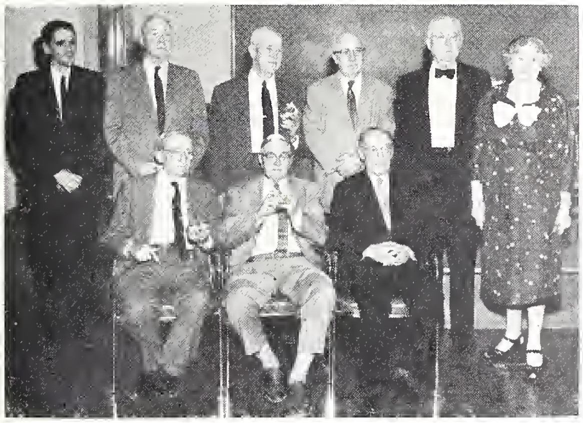
ment of Some Common Ear, Nose and Throat Problems."

This was an interesting, informative and practical discussion and well received by the group.

Paul Rother, M.D., *Secretary*

St. Louis County Medical Society

The St. Louis County Medical Society celebrated Doctors' Day at its regular meeting on March 25 in the auditorium of the St. Louis County Health Center in Clayton. Seventeen doctors who have served the community as practicing physicians for fifty or more years were honored by the presentation to them of gold keys. Seven of the seventeen were present and two were represented by near relatives, and the other eight received their golden keys by mail or messenger.



A business session was held.

Shown in the accompanying picture are (reading from left to right) Dr. Robert C. Kingsland, president of the St. Louis County Medical Society, Drs. Charles R. Shepherd, Freeman L. Finley, T. H. Hale, Eugene R. Brown, and Mrs. J. H. Walton, president of the Woman's Auxiliary. Seated are Drs. Duncan S. Werth, Wade H. Nash and Ernest Spitzer.

Dr. Lyman C. Stocking's key was presented to his daughter, and Dr. Paul O. Vinyard's key was presented to his wife.

Those who were not present but who received keys were Drs. Francis M. Barnes, Albert L. Hertel, John A. Konzelman, Benjamin F. May, George M. Park, James A. Townsend, Joseph J. Vizgird and Walter B. Yost.

Following an address on the history of medicine in the St. Louis area by the Rev. John Francis Bannon, S.J., the presentation of keys was made by Dr. Kingsland.

A delicious and colorful buffet supper was served from a beautifully decorated table in the library of the St. Louis County Hospital.

B. Todd Forsyth, M.D., *Secretary*

FIFTH COUNCILOR DISTRICT

BYRON M. STUART, BOONVILLE, COUNCILOR

Audrain County Medical Society

The Audrain County Medical Society held a dinner meeting at the Country Club in Mexico on Tuesday night, April 21.

Following a social hour and dinner a program on, "Exfoliative Cytology" was presented by Gordon Shaw, M.D., pathologist at the Audrain County Hospital.

Dr. Shaw presented films on cancer of the cervix as an aid to the discussion.

Ernest S. Gantt, Jr., M.D., *Secretary*

EIGHTH COUNCILOR DISTRICT

W. W. TILLMAN, SPRINGFIELD, COUNCILOR

Ozarks Medical Society

A dinner meeting of the Ozarks Medical Society was held at the Rainbow Dinner House in Cassville on Tuesday night, April 14. There were 38 members and Auxiliary members present. Following dinner a scientific program was presented by Dr. Elmer Purcell of Springfield.

His discussion centered around the use, application and misuse of the various antibiotics with special reference to sulfas, penicillin in its various forms, broad spectrum antibiotics, including the newer drugs, tetracyclaine and erythromycin. A lively period of general discussion followed this presentation.

The meeting adjourned at the close of a short business session to meet at the Shadow Rock Park Hotel in Forsyth on May 12.

A. J. Graves, M.D., *Secretary*

NINTH COUNCILOR DISTRICT

J. H. SUMMERS, LEBANON, COUNCILOR

Mid-Missouri County Medical Society

A dinner meeting of the Mid-Missouri County Medical Society and the doctors' wives was held at the Rock Court Cafe in Lebanon on Thursday night, April 23.

The program for the evening was unique, practical and quite interesting. A panel of local physicians discussed, "Sharing Trade Secrets." After all, the passing around of "nuggets of medical wisdom" is for the good of all patients.

M. K. Underwood, M.D., *Secretary*

TENTH COUNCILOR DISTRICT

BEN M. BULL, IRONTON, COUNCILOR

Butler-Ripley-Wayne County Medical Society

A dinner meeting of the Butler-Ripley-Wayne County Medical Society was held at the Northwold Restaurant in Poplar Bluff, Tuesday night, April 28. Some 20 members were present to hear a comprehensive report on the recent meeting of the State Medical Association in Kansas City given by Dr. F. J. Biggs, delegate from Butler County. He explained the procedures of the House of Delegates in considering and acting upon matters brought before it in conformity with the Constitution and By-Laws of the State Association. Following this he gave an account of resolutions and other items considered and actions taken thereto.

A report on the Annual Session was given.

Other business considered by the society included a proposed diabetes drive, additional sewage disposal facilities for Poplar Bluff, a 200-bed civil defense hospital unit for the area and legislative health matters now pending in the Missouri House of Representatives in the form of Senate Bills 24 and 50.

Eugene T. Hansbrough, M.D., *Secretary*

Mineral Area County Medical Society

Carl L. Moyer, M.D., Professor of Surgery at Washington University Medical School, presented the scientific program at a meeting of the Mineral Area County Medical Society Thursday night, April 23, at the State Hospital in Farmington.

Dr. Moyer spoke on, "The Management of the Diabetic Foot." A lively discussion followed his formal presentation.

George K. Watkins, M.D., *Secretary*

Pemiscot County Medical Society

A meeting of the Pemiscot County Medical Society was held April 9. The meeting was called to order by the President, Dr. Aquino. Members present were Drs. Aquino, Bryant, Cain, Caldwell, Chapman, O. W. Cook, John and Gordon Duckworth, Gubin, Hensley, McKaskle, Shirey, Smith, L. B. Painter, A. Painter, Acuff, and Grable. The minutes of the last meeting were read and approved.

Under old business, a letter was read from Dr. H. M. Hardwicke concerning the recent decision of the State Division of Health and its cancellation of certain previous laboratory procedures, due to the cut in appropriations. No specific action was taken on this letter.

Letters were read from Senator J. F. Patterson and Representative Charles Foley from the Legislature of the State of Missouri concerning the Society's stand against House Bill No. 415, introduced in the recent legislature. Both congressmen stated that they were opposed to this bill.

Under new business, a discussion was begun concerning recent action of the County Health Board and its decision to no longer purchase polio vaccine in the care of the indigent and for use in the indigent child clinics held throughout the county. After considerable discussion, a motion was made that the Society go on record as condemning this recent action of the Health Board and urging the County Board to purchase polio vaccine for the indigent, if at all possible. It was further requested in a motion that the secretary notify the chairman of the Board of Health and the respective state representative and senator and the county court clerk. The motion also stated that the local newspaper be notified of the action decided on by the Society. This motion was made, seconded and unanimously approved.

Then, considerable discussion was had concerning the recent Jenkins-Keough Bill, which is before Congress, and it was requested of the secretary that he notify both Senators Hennings and Symington of the Society's support of this bill and urge that they use their influence in providing early passage of this bill.

Dr. Grable stated that the program for the May meeting would consist of a death conference and

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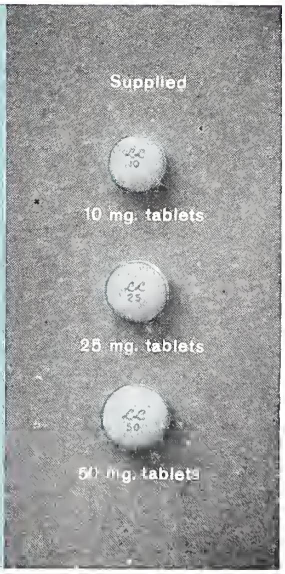

of some discussion by Blue Cross-Blue Shield representatives.

John K. Duckworth, M.D.,
Secretary-Treasurer

Semo County Medical Society

A joint meeting of the Semo County Medical Society and its Woman's Auxiliary was held Monday evening, March 2, at the Country Club in Sikeston.

Guests for the evening were Miss Helen Kinney, Cape Girardeau, and Dr. and Mrs. James Grable, Portageville. Following dinner a short business session was held and then the main program for the evening was presented.

Miss Kinney, of the State College at Cape Girardeau, gave a most interesting and informative discussion concerning the two year associate nursing course recently started at the college. At present this is the only regular college in Missouri which has such a course. Miss Kinney has worked with nurses for many years. She has taught at St. Louis University, served as a member of the State Board of Nurses Examiners, and was head of the Bureau of Public Health Nursing in the Missouri Division of Health for some time.

The nurses at the Southeast State College in Cape, taking the two year associate nursing course, are enrolled at the college, live there, pursue two years of specified college studies and at the same time take training at the Cape Girardeau hospitals under the direct supervision of instructors from the college.

Thirty-five people were in attendance including doctors, their wives and guests.

Thelma Buckthorpe, M.D., *Secretary*

DEATHS

Clapsaddle, Clare J., M.D., Ste. Genevieve, a graduate of St. Louis University Medical School, 1917; member of Mineral Area County Medical Society; aged 68; died March 14.

Greiner, Theodore, M.D., St. Louis, a graduate of Washington University Medical School, 1897; member of St. Louis Medical Society; aged 84; died March 30.

Pote, Thomas B., M.D., St. Louis, a graduate of Washington University Medical School, 1902; member of St. Louis Medical Society; aged 91; died March 30.

McIntire, Landon R., M.D., St. Charles, a graduate of Washington University Medical School, 1933; member of Lincoln-St. Charles County Medical Society; aged 50; died April 3.

Stanze, Frank J., M.D., St. Louis, a graduate of St. Louis College of Physicians and Surgeons, 1909; member of St. Louis Medical Society; aged 79; died April 7.

Hoxie, George H., M.D., Berkeley, California, a graduate of the University of Zurich Medical College, 1901; member of Jackson County Medical Society; aged 87; died April 11.

Murray, Louis F., M.D., St. Louis, a graduate of St. Louis College of Physicians and Surgeons, 1911; member of St. Louis Medical Society; aged 72; died April 26.

Connor, John J., M.D., St. Louis, a graduate of St. Louis University Medical School, 1921; member of St. Louis Medical Society; aged 65; died April 28.

LIBRARY FACILITIES AVAILABLE TO MEMBERS

Following discussion at a Council meeting on the lack of availability of medical literature in some parts of the state, attention has been called to the fact that the University of Missouri renders library services throughout the state, not only of medical books but from its full library.

Regulations and information for borrowing of books by physicians in the state who are not affiliated with the University follow:

1. Borrowers. Any reputable physician living in the state may borrow from the Medical Library.

2. Material that may be borrowed. Books and bound volumes of journals if they are not on the reference or reserve shelves or in constant use.

3. Requesting a loan. Physician writes directly to the Medical Library giving (a) for books, author, title, edition and date of publication; (b) for journals, author and title of article, title, volume number, paging and date of journal.

4. Number of items that may be borrowed. No more than three items may be in the borrower's possession, and in transit, at one time.

5. Period of circulation. All items are loaned for a period of two weeks from the date of receipt by the borrower.

6. Renewals. There are no renewals.

7. Charges. The borrower pays mailing costs for both trips. Refunds are to be made directly to the Medical Library in stamps.

8. Recall. Any item is subject to immediate recall, if needed at the Medical Center, regardless of the time it has been in the borrower's possession.

9. Handling of books. All items are to be wrapped carefully.

10. Fines. A charge of 25 cents will be made for each day each item is overdue. Such fines will also apply in the case of an item being recalled. (If an item has not been returned within ten days after it comes due or has been recalled, the borrower will be billed for both the fine and the cost of replacing the item, and he will be struck from the list of borrowers.)

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1. Kuzell, W. C., and others.: Arch. Int. Med. 92:646, 1953. 2. Wolfson, W. Q.: J. Michigan M. Soc. 54:323, 1955. 3. Strandberg, B.: Brit. J. Phys. Med. 19:9, 1956. 4. Platt, W. D., Jr., and Steinberg, I. H.: New England J. Med. 256:823 (May 2) 1957.

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From the Medical Schools

SAINT LOUIS UNIVERSITY

Twenty-one members of the Saint Louis University medical faculty have received promotions effective September 1, 1959. Four members of the faculty have been raised to the rank of professor. They are Dr. Edward A. Doisy, Jr., professor of biochemistry; Dr. William H. Elliott, professor of biochemistry; Dr. Alfred W. Richardson, professor of physiology, and Dr. Paul Murphy, professor of clinical medicine.

Other promotions are Dr. Willard Bartlett, associate professor of clinical surgery; Dr. Francis Burns, associate professor of clinical surgery; Dr. Charles R. Doyle, associate professor of clinical surgery; Dr. William F. Melick, associate professor of urology; Dr. Harry K. Purcell, associate professor of clinical surgery; Dr. Gene B. Starkloff, associate professor of clinical surgery; Dr. D. Ralph Strength, associate professor of biochemistry; Dr. J. Wendell Davis, assistant professor of biochemistry; Dr. Sung Lan Hsia, assistant professor of biochemistry; Dr. John F. Schweiss, assistant professor of surgery; Dr. Leo C. Senay, Jr., assistant professor of physiology; Dr. John T. Matschiner, senior instructor in biochemistry; Dr. Robert J. Rothweiler, senior instructor in otolaryngology; Dr. Robert E. Ryan, senior instructor in otolaryngology; Dr. John H. Gladney, instructor in otolaryngology; Dr. Robert J. Gresick, instructor in pathology, and Dr. Francis P. Nash, instructor in surgery.

Dr. William F. Melick, associate professor of clinical urology has been appointed director of the department of urology. Dr. Cyrus E. Burford, who has resigned as director of the department, has been named professor emeritus of urology. Dr. Burford has served on the medical faculty for 56 years. He was appointed professor of urology in 1919 and director of the department in 1922. He was awarded a doctor of philosophy degree from Central College in 1899 and a doctor of medicine degree from Marion-Sims Beaumont Medical College in 1902. He also holds an honorary degree from Central College which was awarded in 1923.

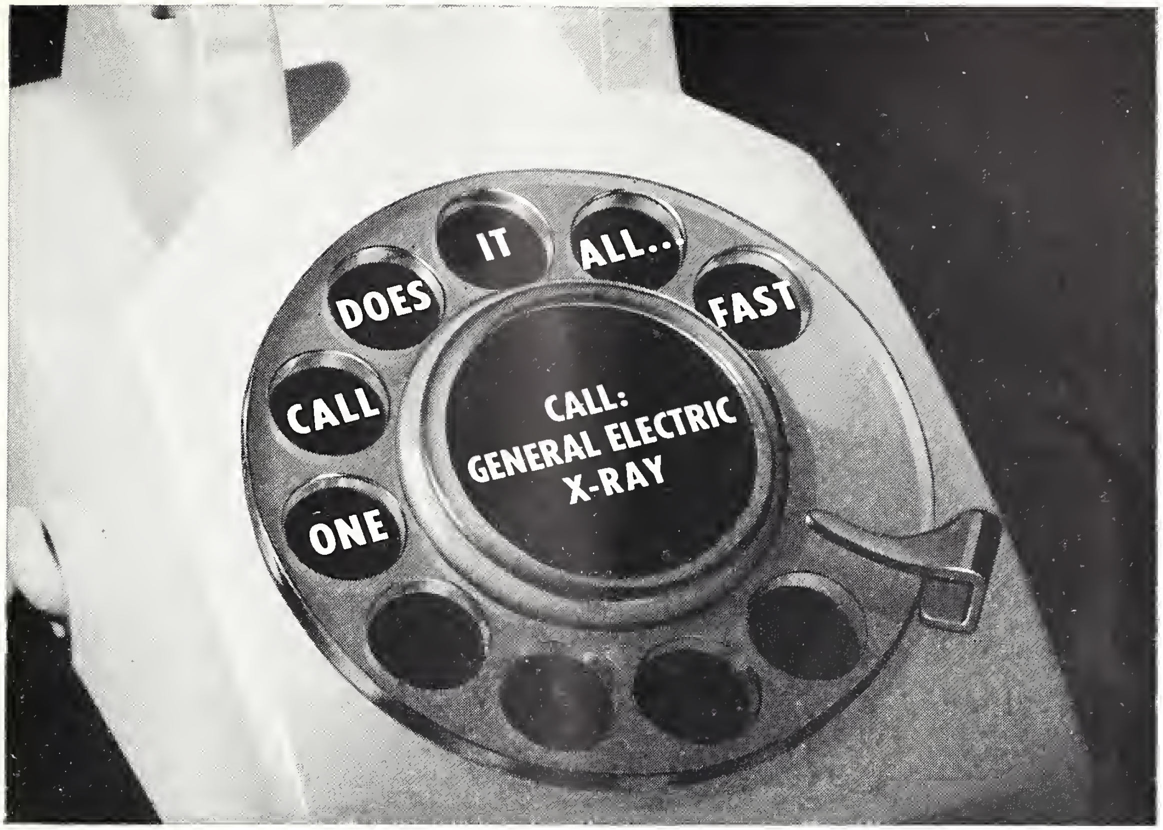
Dr. Melick was awarded his doctor of medicine degree from Washington University in 1939 and his masters in urology degree from Saint Louis University's Graduate School in 1943. He joined the University's teaching staff as an instructor in urology. Dr. Melick is chief of urology service at Cardinal Glennon Memorial Hospital for Children and regional consultant in urology at Veterans Administration Hospital. He formerly served as chief-of-staff at St. Mary's Group of Hospitals and as chief of the urology service at St. Louis County Hospitals.

Lectures, Meetings

A number of the medical faculty participated in the Federation of American Societies for Experimental Biology meetings held in Atlantic City in April. Dr. Valentin Bonifas, associate professor of microbiology, reported in a paper entitled "Nutritional Requirements for Plaque Production by Adenovirus." His research project was in collaboration with Dr. R. Walter Schlesinger, professor of microbiology and director of the department. Dr. Leo C. Senay, Jr., instructor in physiology, reported on "Vascular Responses to Body Heating." The Edward A. Doisy Department of Biochemistry delivered several research papers on bile acids. Dr. Edward A. Doisy, director of the department, Dr. Sung Lan Hsia, senior instructor in biochemistry, Dr. William H. Elliott, associate professor of biochemistry, reported on "Constitution of the Muricholic Acids." Dr. Edward A. Doisy, Jr., associate professor of biochemistry, and George Perry, a graduate student, reported on "Metabolism of Lithocholic Acid." Dr. Sidney Thayer, professor of biochemistry, Dr. John T. Matschiner, instructor in biochemistry, and R. L. Ratliff, graduate fellow, reported on "The New Metabolite of Deoxycholic Acid." Dr. Philip Katzman, professor of biochemistry, and Edward W. Schott, a graduate student, reported on a project related to female sex hormones. The project is entitled "Separation and Estimation of Estradiol Alpha 17." Dr. D. Ralph Strength, assistant professor of biochemistry, and M. J. Sweeney, graduate student, delivered a paper on "Synthesis and Metabolism of Hexahydrohippuric Acid."

Dr. Kazuo K. Kimura, chief of Experimental Medicine and Neuropharmacology Branch, Army Chemical Center, delivered a special lecture on "Fear Gas and Rescue Breathing" in conjunction with the Saint Louis University annual Sigma Xi initiation. Dr. Kimura was awarded his M.D. degree from Saint Louis University in 1953 and was a member of the pharmacology faculty for five years. Dr. Kimura lectured on "Fear Gas," a phenomenal development which was telecast nationally last year. The movie shows how a domineering cat chasing a mouse can be changed into a cringing, fearful animal after breathing the gas. The scenes were televised in Dr. Kimura's laboratories. Dr. Kimura also discussed the more recent concepts of emergency resuscitation with artificial respiration. Fifty-six graduate students and members of the faculty from the School of Medicine, School of Dentistry and School of Graduate Studies were initiated into Sigma Xi.

Dr. Otakar Machek, instructor in orthopedic surgery, attended a conference on multi-handicapped in Kansas City during the month of April.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The conference was sponsored by the Seymour Foundation.

Dr. Alfred Richardson, associate professor of physiology, spoke on the physioligic factors involved in sending a man into outer space in a discussion presented before the President's Council of the University April 9.

Dr. William J. Harrington, associate professor of medicine and director of the Hematology Division, Washington University School of Medicine, delivered the annual William H. Vogt lecture sponsored by the Alpha Kappa Kappa Medical Fraternity of the Saint Louis University School of Medicine on April 16. Dr. Harrington spoke on "The Pathogenesis and Treatment of Thrombocytopenic Purpura." The lecture was established in 1950 to honor the memory of the late Dr. William H. Vogt, a member of the fraternity and professor and director of the Department of Gynecology and Obstetrics.

Dr. Don C. Weir, associate professor of clinical radiology, was guest speaker at the Oklahoma State Radiological Society at its annual meeting held in Tulsa, Oklahoma, in April. He presented a paper on "The Roentgen Aspects of Injury of the Cervical Vertebrae" and moderated an x-ray film diagnostic session.

Dr. C. Rollins Hanlon, professor of surgery and director of the department, was one of the principal speakers at a Cardiovascular Seminar sponsored by the University of Mississippi School of Medicine in April.

Dr. John P. Wyatt, professor of pathology, delivered the final lecture sponsored by the Junior American Dental Association of Saint Louis University. Dr. Wyatt, who is Chief Coroner's Pathologist for St. Louis County, spoke on "Murder, Mayhem and Mystery."

Grant

The United States Public Health Service has awarded a research grant of $7,000 to Dr. Drummond H. Bowden, assistant professor of pathology and director of laboratories at the Cardinal Glennon Memorial Hospital for Children. Dr. Bowden is engaged in the investigation of neuro-muscular diseases. His current research is being conducted jointly with Dr. Robert A. Goyer, an instructor in the department of pathology at the School of Medicine. Dr. Goyer holds a National Foundation fellowship. The investigations are centered in the laboratories at the Cardinal Glennon Memorial Hospital for Children.

WASHINGTON UNIVERSITY

Lectures, Assembly

Dr. Jack L. Strominger, assistant professor and Markle Scholar in pharmacology at Washington University School of Medicine, delivered the seventh annual Alpha Omega Alpha lecture in April at the medical school. He discussed structure and biosynthesis of bacterial cell walls in relation to the mechanism of action of antibiotics. The Washington University chapter, Alpha of Missouri, is the seventh oldest of the society, dating from 1905. The original chapter was founded in 1902. Richard Aach and Albert Rhoton, both senior medical students, are president and vice president, respectively. Dr. Henry G. Schwartz, professor of neurosurgery, is faculty adviser.

Dr. Clinton Woolsey, professor of neurophysiology at the University of Wisconsin, lectured on the "Status of Neurological and Behavioral Research in the Soviet Union" in April in Elliott Auditorium at the Medical School. Dr. Woolsey, who recently returned from a trip through the Soviet Union, was guest of the division of neurology.

Original scientific research by ten senior students at Washington University School of Medicine was selected for presentation at the annual Senior Research Assembly in April. The research projects were carried on in addition to regular classwork during the students' four-year medical school training. Twenty additional student reports were read by title. John Brown, Senior Class president, was assembly chairman. Presenting papers were Robert Laatsch and Robert F. Malison, St. Louis, and William F. Bridgers, Asheville, N. C.; Joel D. Curran, Providence, R. I.; James A. Cross, Madison, N. J.; Gerald E. Hanks, Fresno, Calif.; Duane C. Hellam, Phoenix, Ariz.; Stanley G. Nathenson, Denver, Colo.; Morris Reichlin, Toledo, Ohio, and David Winter, Freeport, N. Y.

Receives Fellowship

Dr. Charles Ward Parker, assistant in medicine at Washington University School of Medicine, has been awarded a post-doctoral fellowship in research and clinical allergy by the Allergy Foundation of America. The two-year grant will support Dr. Parker's work in the division of dermatology, under the direction of Dr. Herman N. Eisen, professor of medicine. He will receive experience in both investigative work and clinical allergy. Dr. Parker received both his undergraduate and medical degrees from Washington University, the latter cum laude in 1953. He interned at Barnes Hospital from 1953 to 1954 and was assistant resident in internal medicine there from 1956 to 1958. He is currently chief resident in internal medicine on the ward medical service at Barnes. A Mead Johnson Residency Scholarship for 1958-1959 was awarded to him by the American College of Physicians.

Appointment

Dr. Wilbur A. Thomas, associate professor of pathology at Washington University, has been named professor of pathology and chairman of

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that department at Albany Medical College, Albany, N. Y. He will also be pathologist-in-chief at Albany Hospital. The appointments are effective July 1. Dr. Thomas was named instructor in pathology at Washington University in 1953 and promoted to associate professor in 1957. From September 1957 to March 1958, he was visiting professor and acting head of the department of pathology at the University of Baghdad, under a Fulbright fellowship. He has conducted research into the pathology of cardiovascular illnesses.

Child Psychiatry Division Opens

The new William Greenleaf Eliot division of child psychiatry at Washington University School of Medicine opened in April at the former Mission Free School, 369 North Taylor Avenue. The division was named for the Rev. Dr. William Greenleaf Eliot, first chancellor of the university. He founded the first Unitarian Church in St. Louis and opened the Mission Free School in the church basement for "children of the poor." The child psychiatry division consists of two units, the Child Evaluation Clinic for diagnosis and treatment of mentally retarded children, and the Community Child Guidance Clinic for emotionally disturbed children. Both clinics were founded with the help of the United Fund and the Children's Research Foundation. Members of the Mission Free School board of managers are serving on advisory councils of both clinics.

New Eye Surgery Instrument

A $13,000 German light coagulator for use in bloodless eye surgery has been obtained by the Department of Ophthalmology in McMillan Hospital at the Medical Center. The instrument projects rays of light to a point on or within the eye without in any way affecting or damaging surrounding tissue. It can burn off tumors or close holes in cases of retina detachment. Washington University's new instrument is one of three now in use in the United States. The others are at the Institute of Ophthalmology, New York City, and at Stanford University in California.

UNIVERSITY OF MISSOURI

Tours, Meetings and Lectures

About 50 restaurant operators from the State of Missouri, who were in Columbia attending a restaurateur short course in cooperation with the Missouri Restaurant Association, toured the University Hospital Food Service on April 8.

On Monday, April 13, a tour of the Medical Center was conducted for 80-90 leaders and executives of the Campfire Girls, the group being comprised of representatives from Missouri, Iowa, Colorado, Wyoming, Nebraska and Kansas.

Phi Beta Pi Fraternity held its annual Lectureship on Friday, April 17, at 4:00 p.m. in the Medical Center Auditorium. Nicholas A. Michels, M.A., D.Sc. (Louvain), professor of anatomy at the Daniel Baugh Institute of Anatomy, Jefferson Medical College, Philadelphia, guest lecturer for this occasion, spoke on "The Newer Anatomy of the Liver and Gall Bladder, With Historical Data on Dr. Justus Ohage, Graduate of the University of Missouri and the First to Perform a Cholecystectomy in America."

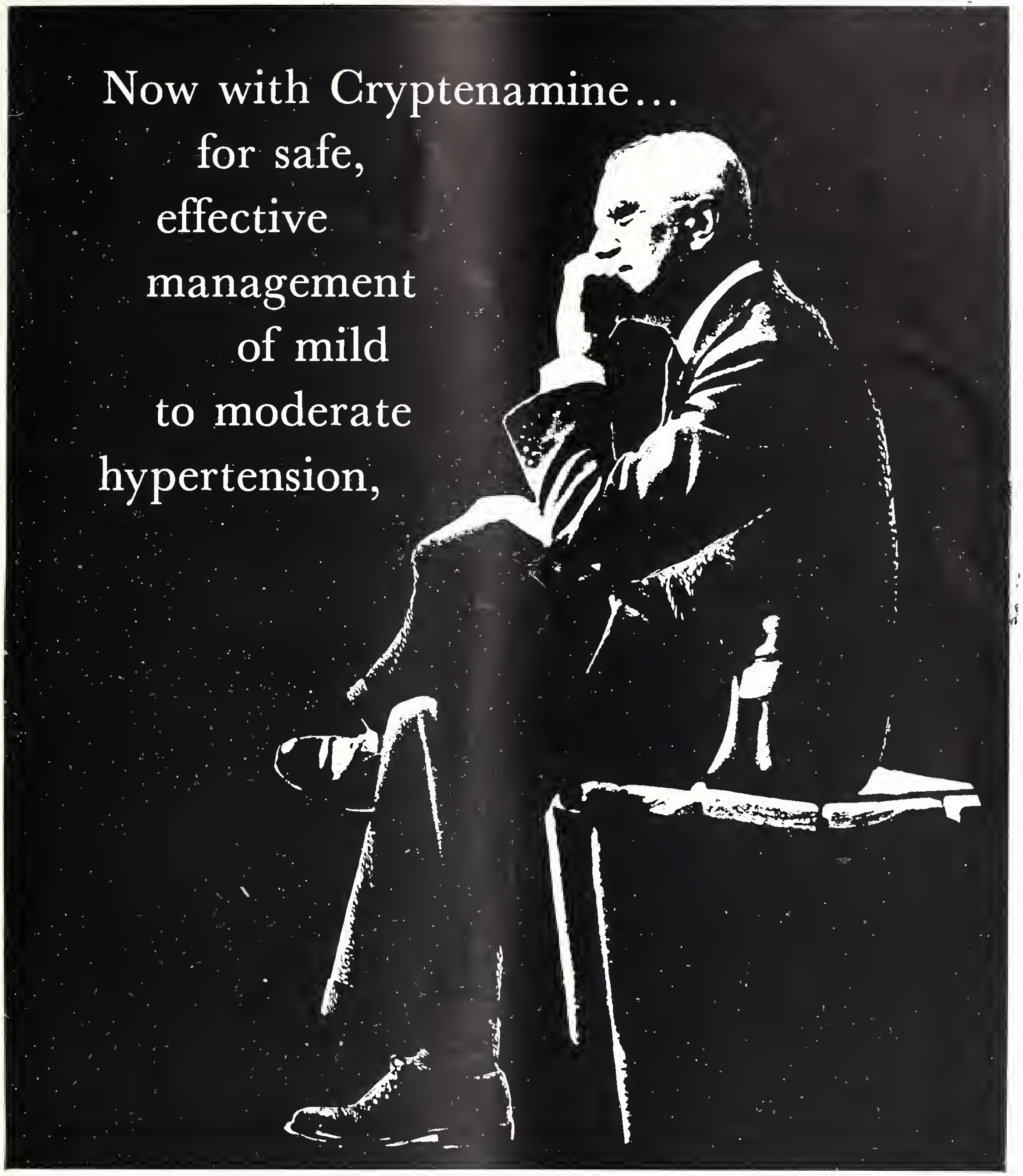
A Conference of the National Farmers Organization was held on April 17, in the Medical Center Auditorium. The program consisted of guest speakers who discussed various farm problems and their solutions. Attendance numbered approximately 225.

A series of lectures on legal medicine is being conducted at the Medical Center every Saturday from 11:00 a.m. through 1:00 p.m. beginning April 25 and running until May 23, for all third year medical students and interested members of the faculty and staff. Legal aspects of medicine will be discussed by David Collins, attorney-at-law, from Macon, Missouri.

Trips and Talks

Among those attending the meeting of the Missouri State Medical Association held at the Hotel Muehlebach in Kansas City April 5 through 8, were the following members of the University of Missouri School of Medicine: Dr. Gwilym S. Lodwick, acting dean of the School of Medicine and professor and chairman of the Department of Radiology; Dr. M. D. Overholser, professor and chairman of the Department of Anatomy; Dr. Joseph E. Flynn, professor and chairman of the Department of Pathology; Dr. M. Pinson Neal, professor emeritus of pathology; Dr. Vincent Perna, assistant professor of pathology; Dr. Robert Jackson, professor and chairman of the Department of Pediatrics; Dr. Clement Brooke, assistant professor of pediatrics; Dr. Fikri Hanna, instructor in pediatrics; Dr. Hugh E. Stephenson, professor and chairman of the Department of Surgery; Dr. Samuel Black, professor of neurosurgery; Dr. John Buessler, associate professor of surgery; and Dr. Kenneth Keown, professor of anesthesiology. At this meeting Dr. Flynn was appointed a member of the Laboratory Committee, Dr. Neal served as a member of the Committee on Scientific Assembly and Post-Graduate Medical Education, and Dr. Black participated as a member of the Clinical Pathologic Conference panel. While in Kansas City, Dr. Overholser also attended the luncheon and business meeting of the Alumni Association of the University of Missouri School of Medicine, at which he served as a member of the Nominating Committee for the election of officers.

The annual meeting of the American Association of Anatomists was held April 1, 2 and 3 at the University of Washington School of Medicine in Seattle, Washington. The University of Missouri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Department of Anatomy was represented by several delegates at the meeting, including Dr. M. D. Overholser, professor and chairman of the Department of Anatomy, who was elected a member of the nominating committee for 1959-60. Another participant in the program was Dr. E. W. Lowrance, professor, who presented two papers: "Measurements and Indices of Sterna of Asiatic Skeletons" and "Relative Weights and Lengths of the Bones From Asiatic Skeletons Compared With Other Available Data" (with Dr. Homer B. Latimer, Department of Anatomy, University of Kansas School of Medicine). Dr. J. W. Brown, associate professor, presented a paper entitled "The Spinal Trigeminal Nuclear Complex in Human Fetuses of 9 to 13½ Weeks of Menstrual Age." Other members of the faculty attending the meeting included Dr. F. E. Doenges, Dr. H. E. Brown and Dr. K. I. Fitch, assistant professors in the Department of Anatomy, and Dr. A. W. Merrick, assistant professor of physiology. During the trip Dr. H. E. Brown also visited the Department of Anatomy at the University of Utah in Salt Lake City.

On April 10 Dr. F. E. Doenges visited the Department of Neurology and Neurosurgery at Washington University in St. Louis and attended a presentation of a series of papers on electrophysiologic investigations and neurologic observations.

Attending the Federation of American Societies for Experimental Biology held April 12 through 17 in Atlantic City, were the following staff and faculty members from the University of Missouri School of Medicine: Dr. T. D. Luckey, professor and chairman of the Department of Biochemistry, Dr. Owen Koeppe, associate professor, Dr. A. White, assistant professor; Dr. B. A. Westfall, professor and chairman of the Department of Physiology and Pharmacology, and Dr. J. E. Randall, associate professor of physiology and biophysics. Dr. Koeppe attended a conference held in Gatlinburg, Tennessee, sponsored by the Biology Division of Oak Ridge Laboratories from April 1 to 4, 1959. The topic of the conference was "Enzyme Reaction Mechanisms." On April 8, 9, and 10, Dr. A. White attended a Tissue Culture Association Conference in Atlantic City.

On March 30, Dr. Frank B. Engley, Jr., professor and chairman of the Department of Microbiology, attended a planning meeting in St. Louis for the 1959 National Meeting of the Society of American Bacteriologists to be held in St. Louis on May 10-14, 1959. Dr. Engley spoke in Jefferson City on April 17 to the Missouri State Nurses Association, the subject of his lecture being "Infectious Disease and the Hospital Environment."

At the annual meeting of the Missouri Society of Medical Technologists held April 7 in Kansas City, Dr. Herbert S. Goldberg, associate professor of microbiology, presented a talk on "Identification and Significance of Mima-Herellea Organisms in Clinical Bacteriology."

At the meeting of the American College of Obstetricians and Gynecologists held from April 5 through 8, in Atlantic City, Dr. J. S. Roden, associate professor and chairman of the Department of Obstetrics and Gynecology, served as moderator on April 7 on the discussion of "Carcinoma in situ of Cervix" and on April 8, on the discussion of "Ovarian Tumors." Others attending this meeting from the Department of Obstetrics and Gynecology were Dr. David G. Hall, assistant professor, and Dr. Billy D. Viele, assistant instructor and third year resident.

Dr. Joseph E. Flynn, professor and chairman of the Department of Pathology, has recently been appointed to serve as chairman of the Medical Education Committee of the Leukemia Guild of Missouri and Illinois. On April 4, Dr. Flynn and Dr. Vincent P. Perna, assistant professor, participated in a workshop on "Coagulation" sponsored by the Missouri Society of Pathologists which was held in Kansas City. On April 1, Dr. Perna, Dr. Donald Q. Cochran, assistant professor of radiology, and Dr. William Wade, assistant professor of surgery, traveled to St. Joseph to participate in a panel discussion on "Diagnosis and Management of Carcinoma of the Breast," sponsored by the Buchanan County Medical Society and the American Cancer Society.

A recent guest in the Department of Pediatrics was Dr. Genevieve Stearns from the State University of Iowa who, in addition to holding conferences with the residents in the department, lectured to students in the Department of Biochemistry and to third and fourth year students on obstetrics and pediatrics services. Her date of visit was March 23, 1959, and her topic was "Nutrition in Infants and Children."

Another guest lecturer in the Department of Pediatrics was Dr. Ray R. Rembolt, director of the State University of Iowa, who visited on March 24, to appear before the United Cerebral Palsy Group which met in the Medical Center Auditorium.

On April 1 Dr. Robert L. Jackson, professor and chairman of the Department of Pediatrics, spoke on "Is the Maximum Always the Optimum?" at a meeting of the Dairy Council of St. Louis at St. Louis. Dr. Jackson spent April 2 and 3, in Washington, D. C., where he served as chairman for the Committee of Infant Nutrition and presented the committee's report at the meeting of the Food and Nutrition Board of the National Research Council. Dr. Jackson discussed a paper on "Treatment of Diabetes Acidosis" at the Council Meeting of the Missouri State Diabetes Association held in Kansas City on April 6.

"Epidemiologic Factors in Hospital Staphylococcal Infections" was the topic of the speech presented to the Missouri State Medical Association

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in Kansas City on April 6 by Dr. Clement E. Brooke, assistant professor.

Dr. Gwilym S. Lodwick, professor and chairman of the Department of Radiology, spoke to a group of radiologists on bone tumors in Williamstown, West Virginia, on March 19-20.

On April 5 Dr. Theodore E. Keats, associate professor, presented a paper entitled "An Analysis of the Prognostic Significance of the Roentgen Manifestations of Lung Cancer" before the annual combined meeting of the Missouri Chapter of the American College of Chest Physicians and the Missouri Trudeau Society in Kansas City.

Research reports were presented by two members of the University of Missouri faculty at the fourth conference on Radioactive Isotopes in Agriculture, held April 2 and 3 at Oklahoma State University. Dr. Charles Turner, professor of dairy husbandry, and Dr. Henry A. McQuade, associate professor of radiobiology, were those attending from the University. Dr. McQuade spoke to the group on "Cytogenetic Repercussions of Incorporated Radioactive Thymidine." Discussed were new methods of employing atomic energy for plant and animal research. The conference was cosponsored by Associated Midwest Universities and Argonne National Laboratory of Lemont, Illinois.

On March 17, Dr. Hugh E. Stephenson, professor and chairman of the Department of Surgery, and Dr. William Wade, assistant professor, attended the St. Louis Surgical Society meeting in St. Louis and heard Dr. Francis D. Moore of the Harvard Medical School lecture on "The Regulation of the Volume of Body Fluids." Dr. Stephenson spoke on "Cardiac Surgery" at a meeting of the University Faculty Club March 21 at the University Student Union. On April 13 Dr. Stephenson delivered a lecture at the Medical Center to a group of student nurses on "Cardiac Arrest."

Recent guests in the Department of Surgery were Dr. C. Alan McAfee of St. Louis, who conducted Surgical Grand Rounds on March 18; Dr. James Stickler of California, a resident in obstetrics and gynecology, on March 23; and Dr. Stuart Exon of Jefferson City, who conducted Grand Rounds in the department on April 1.

On April 4, Dr. Kenneth Keown, professor of anesthesiology, spoke to the Panhandle District Medical Society in Plainview, Texas, on "Resuscitation of the Newborn After Vaginal or Abdominal Delivery." Dr. Keown, during his attendance at the meeting of the Missouri State Medical Association in Kansas City during the early part of April, spoke to the group on "Anesthesiology Including Complications."

Gifts and Grants

Dr. C. Thorpe Ray, professor and chairman of the Department of Medicine, was recently awarded an unrestricted grant by the Smith, Kline and French Foundation of Philadelphia for the program he plans in the Department of Medicine.

Dr. Michael H. Ivey, assistant professor of microbiology, has been awarded a grant by the University of Missouri Research Council for studies on Trichomonas vaginalis.

A supplement of $15,000 to the Graduate Training Grant in Diabetes, Metabolism and Endocrinology, has been awarded to Dr. Robert L. Jackson, professor and chairman of the Department of Pediatrics, by the National Institutes of Health. The funds will provide for advanced clinical and research training for physicians specializing in metabolism and endocrinology, with special emphasis on diabetes.

Preceptorships in General Practice

The third and last group of fourth year medical students have been assigned to the following physicians in the State of Missouri for the period of April 15 through May 27. The physicians listed were suggested by the Committee on Medical Education and Hospitals of the Missouri State Medical Association: Dr. William R. Richardson, Union; Dr. Sydney O. Schroeder, Liberty.

New Appointments

Dr. James M. Pickens has been appointed instructor in pediatrics (trainee in diabetes) effective July 1. Dr. Pickens received his A.B. in 1951 from the University of Texas and his M.D. in 1956 from the University of Texas Medical Branch in Galveston. He is presently completing a pediatric residency at the Children's Medical Center in Dallas, Texas.

Dr. Karl R. Moedl has been appointed assistant instructor and third year resident in surgery effective July 1. Dr. Moedl received his M.D. degree from the University of Colorado School of Medicine in 1956. He is at present a Resident in General Surgery at the Veteran's Hospital in Albuquerque, New Mexico.

Dr. Nathan C. Galloway has been appointed assistant instructor and second year resident in medicine effective July 1. Dr. Galloway received his B.S. degree in 1953 from Tulane University and his M.D. in 1957 from the Tulane University School of Medicine. He is presently a Resident in Medicine at New Orleans Veteran's Administration Hospital.

Dr. Isaias I. R. Goco was appointed assistant instructor and first year resident in surgery effective April 1 through September 30. Dr. Goco received his A.A. degree in 1950 from the College of Liberal Arts and his M.D. degree in 1956 from the College of Medicine, both at the University of St. Thomas, Manila, Philippines.

Lee C. Sheppard, Jr., has been appointed assistant instructor and intern in the Department of Pathology effective July 1. He received his A.B. degree in 1955 from the University of Missouri and will receive his M.D. degree in June, 1959 from the St. Louis University School of Medicine.

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[1] Dennison, A.D., Jr.: Am. J. Cardiol. 400-403 (March) 1958.

AC-259 M

Missouri Medicine in Review

Leo H. Pollock, M.D.

FORTY YEARS AGO

With the close of the sixty-second annual session of the State Association on May 28 at Excelsior Springs, one of the most interesting and successful meetings of the organization passed into history. The attendance was a surprising feature, there being 434 members registered as against 324 last year.

Leo H. Pollock, M.D.

Dr. John O'Connell, formerly of St. Louis, has been honorably discharged from the army and moved permanently to Pomeroy, Iowa.

Dr. T. B. M. Craig of Nevada has been appointed superintendent of State Hospital No. 3, to take the place of Dr. William P. Bradley who has resigned.

The faculties, student body and alumni of Washington University, St. Louis, held a memorial service for Washington University men who gave their lives in the great war, Friday afternoon, May 30, at the Graham Memorial Chapel, University Campus.

The Washington University School of Medicine, St. Louis, has been tendered the sum of $150,000 by the General Education Board on condition that an equal amount be raised by subscription. This fund of $300,000 is to be used for the endowment of the Department of Parmacology.

It is hoped that there may be an endowment of the professorship of diseases of the nervous system in the Harvard Medical School in memory of Dr. James Jackson Putnam. In the development of this increasingly important branch of medicine, Dr. Putnam was a pioneer in Boston and in the country at large, while he was widely recognized in Europe as a neurologist of distinction. He inaugurated the neurological clinic at the Massachusetts General

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Hospital in 1872, and through forty years of service was devoted to its interests, and to teaching in the Harvard Medical School. In 1893 he was appointed the first professor of diseases of the nervous system; the professorship was then, and has remained, without endowment.

TWENTY-FIVE YEARS AGO

Dr. William Henry Welch, dean of American medicine, died April 30, 1934, at the age of 84 in the Brady Urological Institute of the Johns Hopkins Hospital in the foundation of which this internationally known educator played a major part. He isolated the organism causing gas gangrene, the old time foe of the surgeons. No other physician has ever received more honorary memberships in different universities throughout the world and it is doubtful if any other physician ever held as many offices.

The Seventy-Seventh Annual Session of the Missouri State Medical Association at St. Joseph was the successful culmination of much diligent work on the part of the committees and the Buchanan County Medical Society. Over four hundred members and guests spent four busy days in the scientific and the business sessions. An interesting innovation presented for the first time at this session was the so-called "table demonstrations." These showed the methods used in the actual examination of patients leading to a diagnosis and a prescribed treatment. The subjects were rectal disorders, gonorrhea, syphilis, gastrointestinal diseases, eye, ear, nose and throat diseases, diphtheria immunization, blood typing and biopsy. The demonstrations were given in rooms seating from 20 to 30 persons and attracted audiences that often filled the seats to capacity. The Association accepted the invitation of the Clay County Medical Society to meet in Excelsior Springs in 1935.

The Ophthalmic Section of the St. Louis Medical Society elected the following officers at a meeting April 13: President, Dr. Roy E. Mason; vice president, Dr. John F. Hardesty; secretary, Dr. H. Noland Fisher; treasurer, Dr. Otto M. Koenig.

Forty-four members of the graduating class of 1904 of the St. Louis University School of Medicine gathered at a reunion at the Coronado Hotel, St. Louis, May 14. Twenty-nine others were unable to attend. The class numbered ninety-one at its graduation.

TEN YEARS AGO

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(Continued on page 699)

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Missouri Medicine

JOURNAL OF THE MISSOURI STATE MEDICAL ASSOCIATION

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Vol. 56 July, 1959 Number 7

Minutes of the House of Delegates

One Hundred First Annual Session

April 5, 6, 7, 8, 1959
Kansas City

Sunday Session

The first meeting of the House of Delegates of the One Hundred First Annual Session of the Missouri State Medical Association was called to order at 1:30 p.m., April 5, in the Colonial Ball Room, Hotel Muehlebach, Kansas City, with Oscar P. Hampton, M.D., University City, Speaker, presiding.

Officers, Councilors and Delegates present during the Annual Session follow:

Officers

President	W. F. Francka, Hannibal
President-Elect	Ralph Perry, Kansas City
Secretary	John I. Matthews, Jefferson City
Treasurer	R. O. Muether, St. Louis
Vice President	M. T. English, Kirksville
Vice President	James C. Cope, Columbia
Vice President	W. O. Finney, Chaffee
Speaker of the House	Oscar P. Hampton, University City
Vice Speaker of the House	William C. Mixson, Kansas City

Councilors

1st District	Donald M. Dowell, Chillicothe
2nd District	B. L. Murphy, Hannibal
3rd District	Leonard T. Furlow, St. Louis
4th District	Joseph C. Creech, Troy
5th District	B. M. Stuart, Boonville
6th District	C. G. Stauffacher, Sedalia
7th District	Kenneth C. Hollweg, Kansas City
8th District	W. W. Tillman, Springfield
9th District	J. H. Summers, Lebanon
10th District	Ben M. Bull, Ironton

DELEGATES

First District

Andrew	W. C. Baker, Savannah
Buchanan	Joseph L. Fisher, St. Joseph
Buchanan	Ernest E. Wadlow, St. Joseph
Clay	James E. McCormick, N. Kansas City
Clay	Sidney Schroeder, Liberty
Clinton	
Grand River	
Caldwell	
Livingston	V. D. Vandiver, Chillicothe
Carroll	John H. Platz, Carrollton
Grundy	C. H. Cullers, Trenton
Daviess	Fred K. Wilson, Winston
Harrison	W. A. Broyles, Bethany
Linn	John R. Dixon, Brookfield
Mercer	
DeKalb	James H. Sweiger, Maysville
Nodaway-Holt-Atchison-Gentry-Worth	Henry C. Bauman, Maryville
Nodaway-Holt-Atchison-Gentry-Worth	Albert L. Carlin, Stanberry
Nodaway-Holt-Atchison-Gentry-Worth	Frank B. Matteson, Grant City
Platte	E. G. Parker, Platte City

Second District

Chariton-Macon-Monroe-Randolph	George W. Hawkins, Salisbury
Chariton-Macon-Monroe-Randolph	D. E. Eggleston, Macon
Chariton-Macon-Monroe-Randolph	J. W. Fleming, Moberly
Lewis-Clark-Scotland	L. Y. Davis, Canton
Marion-Ralls-Shelby	R. J. Lanning, Hannibal
North Central	
Adair	J. J. Wimp, Kirksville

Third District

St. Louis City	J. William Thompson, St. Louis
St. Louis City	Robert W. Kelley, St. Louis
St. Louis City	G. H. Lawrence, St. Louis
St. Louis City	E. M. Cannon, St. Louis
St. Louis City	David N. Kerr, St. Louis
St. Louis City	Durand Benjamin, St. Louis
St. Louis City	V. E. Scherman, St. Louis

St. Louis City	A. W. Neilson, St. Louis
St. Louis City	George L. Hawkins, Jr., St. Louis
St. Louis City	Dean Sauer, St. Louis
St. Louis City	J. P. Eberle, St. Louis
St. Louis City	H. W. Wiegand, St. Louis
St. Louis City	Paul F. Max, St. Louis
St. Louis City	A. M. Repetto, St. Louis
St. Louis City	J. B. Shapleigh, St. Louis
St. Louis City	Louis H. Kohler, St. Louis
St. Louis City	R. K. Earp, St. Louis
St. Louis City	J. Otto Lottes, St. Louis
St. Louis City	George E. Thoma, Jr., St. Louis
St. Louis City	R. B. Bassett, St. Louis
St. Louis City	Charles S. Sherwin, St. Louis
St. Louis City	A. J. Signorelli, St. Louis
St. Louis City	Lee T. Ford, Jr., St. Louis
St. Louis City	John E. Byrne, St. Louis
St. Louis City	Frank Zingale, St. Louis

Fourth District

Franklin-Gasconade-Warren	John F. Pearl, St. Clair
Franklin-Gasconade-Warren	George Workman, Hermann
Franklin-Gasconade-Warren	H. H. Schmidt, Marthasville
Jefferson	Frank L. Kozal, Crystal City
Lincoln-St. Charles	E. O. Dameron, Elsberry
Lincoln-St. Charles	P. H. Rother, St. Charles
St. Louis County	E. B. Drescher, St. Louis
St. Louis County	L. F. Howe, St. Louis
St. Louis County	Joseph B. Kendis, St. Louis
St. Louis County	William H. Bailey, St. Louis
St. Louis County	E. V. Cowdry, Jr., St. Louis
St. Louis County	O. P. Hampton, University City
St. Louis County	Paul R. Whitener, St. Louis
St. Louis County	William H. Grundmann, St. Louis
St. Louis County	Robert Kingsland, Clayton

Fifth District

Audrain	Harold D. Lankford, Mexico
Boone	M. Pinson Neal, Columbia
Boone	James C. Cope, Columbia
Callaway	James Ritterbusch, Fulton
Camden	
Cole	G. D. Shull, Jefferson City
Cooper	
Howard	W. A. Bloom, Fayette
Miller	
Moniteau	E. A. Kibbe, California
Montgomery	
Morgan	Jack Gunn, Versailles

Sixth District

Benton	
Henry	
Johnson	Charles Lederer, Warrensburg
Lafayette-Ray	G. K. Davault, Richmond
Pettis	A. L. Lowe, Sedalia
Saline	R. C. Haynes, Marshall
West Central	
Bates	A. L. Hansen, Butler
Cass	O. B. Barger, Harrisonville
Cedar	Robert Magee, El Dorado Springs
St. Clair	
Vernon	Roy Pearse, Nevada

Seventh District

Jackson	James D. Bennett, Kansas City
Jackson	Hector W. Benoit, Kansas City
Jackson	John F. Bowser, Kansas City
Jackson	Will R. Eubank, Kansas City
Jackson	Robert W. Forsythe, Kansas City
Jackson	Charles F. Grabske, Jr., Independence
Jackson	William W. Gist, Kansas City
Jackson	John A. Growdon, Kansas City
Jackson	James A. Jarvis, Kansas City
Jackson	William W. Kitchen, Kansas City
Jackson	John H. Mayer, Jr., Kansas City
Jackson	William C. Mixson, Kansas City
Jackson	Joseph C. Williams, Jr., Kansas City
Jackson	Russell D. Shelden, Kansas City
Jackson	James R. McVay, Jr., Kansas City

Eighth District

Barton-Dade	Elmer W. Taylor, Lockwood
Dallas-Hickory-Polk	Olin Griffin, Buffalo
Greene	Stanley S. Peterson, Springfield
Greene	John P. Ferguson, Springfield
Greene	Kenneth E. Knabb, Springfield
Jasper	S. W. Scorse, Joplin
Jasper	W. T. McNew, Carthage
Ozarks	
Barry	Mary Jane Newman, Cassville
Lawrence	Kenneth Glover, Mt. Vernon
Stone	Fred Wommack, Crane
Christian	
Taney	J. M. Threadgill, Forsyth
Newton	M. C. Bowman, Neosho
McDonald	J. J. Royce, Noel
Webster	T. M. Macdonnell, Marshfield

Ninth District

Mid-Missouri	
Phelps	Barbara Russell, Rolla
Crawford	
Dent	B. J. Bass, Salem
Pulaski	
Maries	
Laclede	H. W. Carrington, Lebanon
South Central	
Howell	C. F. Callihan, West Plains
Oregon	C. W. Cooper, Thayer
Texas	T. J. Burns, Houston
Wright	
Douglas	
Ozark	

Tenth District

Butler-Ripley-Wayne	Fred J. Biggs, Poplar Bluff
Butler-Ripley-Wayne	H. H. Cline, Piedmont

Cape Girardeau	Glenn Tygett, Cape Girardeau
Dunklin	W. D. English, Cardwell
Mineral Area	
St. Francois	H. M. Roebber, Bonne Terre
Iron	
Madison	
Washington	
Reynolds	
Ste. Genevieve	
Pemiscot	
Perry	
Semo	
Stoddard	
New Madrid	Sam Sarno, Morehouse
Mississippi	W. O. Finney, Chaffee

The President, W. F. Francka, M.D., Hannibal, delivered the invocation.

Kenneth Knabb, M.D., Springfield, gave a preliminary report of the Committee on Credentials. The Speaker announced that the roll call would be marked from the delegates' credential cards.

Registration was held in the Grand Ball Room.

Speaker: The next order of business is the reading of the minutes of the previous meeting. These were published in the July 1958 issue of Missouri Medicine.

Registration continued through the session.

Upon motion, duly seconded, the minutes were approved as published.

The Speaker of the House appointed reference committees.

The Speaker gave instructions to the delegates and appointed the following Reference Committees:

REFERENCE COMMITTEE ON MISCELLANEOUS AFFAIRS

David N. Kerr, M.D., St. Louis, Chairman.
E. B. Drescher, M.D., St. Louis County.
Joseph L. Fisher, M.D., St. Joseph.
Joseph C. Williams, Jr., M.D., Kansas City.
O. B. Barger, M.D., Harrisonville.

REFERENCE COMMITTEE ON RESOLUTIONS

W. D. English, M.D., Cardwell, Chairman.
Robert W. Kelley, M.D., St. Louis.
T. M. Macdonnell, M.D., Marshfield.
Joseph B. Kendis, M.D., St. Louis.
William M. Kitchen, M.D., Kansas City.

REFERENCE COMMITTEE ON MEDICAL EDUCATION AND PUBLIC WELFARE

Stanley S. Peterson, M.D., Springfield, Chairman.
William Eubank, M.D., Kansas City.
W. C. Baker, M.D., Savannah.
Charles S. Sherwin, M.D., St. Louis.
Roy W. Pearse, Jr., M.D., Nevada.

REFERENCE COMMITTEE ON AMENDMENTS TO THE CONSTITUTION AND BY-LAWS

W. W. Gist, M.D., Kansas City, Chairman.
James C. Cope, M.D., Columbia.
Glenn J. Tygett, M.D., Cape Girardeau.
Louis H. Kohler, M.D., St. Louis.
John R. Dixon, M.D., Brookfield.

REFERENCE COMMITTEE ON REPORTS OF OFFICERS

William T. McNew, M.D., Carthage, Chairman.
Jack Gunn, M.D., Versailles.
Paul Max, M.D., St. Louis.
John F. Pearl, M.D., St. Clair.
C. F. Callihan, M.D., West Plains.

REFERENCE COMMITTEE ON NECROLOGY

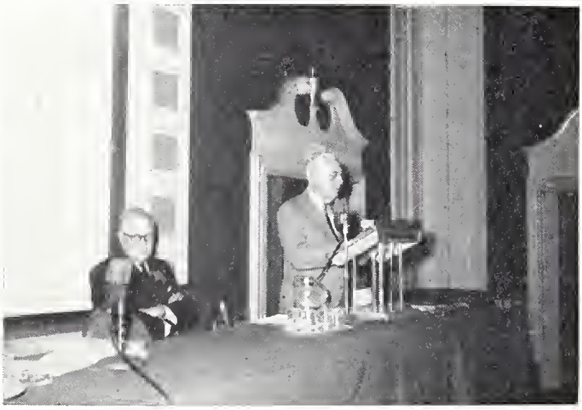
Paul R. Whitener, M.D., St. Louis, Chairman.
R. J. Lanning, M.D., Hannibal.
G. Donald Shull, M.D., Jefferson City.
Edward M. Cannon, M.D., St. Louis.

W. F. Francka, M.D., Hannibal, presented the President's Message as follows:

PRESIDENT'S MESSAGE

Mr. Speaker, Members of the House of Delegates: This is the talk of a lame duck. Some might go so far as to say a dead duck. This would, however, be premature. Perhaps a fair compromise would be "dying swan." In any case, this is my swan song. I hope it may have meaning for the members of this House—particularly for the younger members to whom the profession and the Association must look for leadership in meeting problems that seem to me to grow more difficult every day.

Over a period of more than 30 years since 1926, I have attended all but three of the Annual Sessions of the Missouri State Medical Association. I served as a member of the House from 1937 to 1942 and as Speaker from 1942 to 1945. Since then I have been continuously a member of the Council. I have had the high honor of being your President. Now that my active career in Missouri medicine is coming to a close, I want to report that I have found every minute of it challenging and exciting. It has had its moments of discouragement and disappointment. But it has had, too, its times of high satisfaction.


Dr. Francka gave the President's Message.

At no time, however, in the whole 30-odd years I have been active in MSMA have I felt the need to be so great as it is at this moment for more energetic and more dedicated participation by individual physicians in the affairs of their Association. MSMA is the only agency in our state that can be medicine's effective voice in influencing a trend of events that each year seems to me more fraught with danger for both the doctor and his patient.

I want to say to you today, as solemnly as I can, that, if we do not in the next 10 years find means to get more physicians to work harder in medical association affairs—not only in Missouri but throughout the nation—at the end of that time we shall not recognize the face of medicine in America as we have known it. Nor shall we recognize its soul.

From certain points of view, the recent decades have been good for medicine. We have seen, perhaps, the most rapid rate of scientific progress in the whole history of the profession. And that rate of discovery of new knowledge and new technics continues to grow more rapid every year. The capacity of medical science to serve mankind is the most exciting and the most challenging fact of our present situation.

From the point of view, too, of a good life for the individual physician—both in his sense of achievement in his practice and in the more material sense of economic success and comfort for himself and his family—the years we have lived through in the recent past have been good years for doctors. The years continue, as it seems, to be good ones.

In this respect—this apparent look of well-being, progress and prosperity—the medical profession does not seem to me to differ much from other groups of the American population. Income, education, physical enjoyment of the good things of life, leisure time—all these things that people have worked for and yearned for in times past—on the surface it might seem we have them all, and that the present is a time when we could permit ourselves to be pleased with our circumstances and to enjoy them.

The real facts are, as we know, however, something very different from the surface appearances. Our nation and its allies of the West are confronted with an implacable enemy whose purpose it is to make civilization something drastically different from our dream of a world of free men at peace. Our economy, that looks on the surface so strong, is sapped year after year by the ravages of an apparently endless inflation. Our people, who would seem to have so much that ought to contribute to confidence and serenity, are, in fact, it appears, afflicted with tensions and anxieties not previously known in American life, and juvenile delinquency would seem to be a problem second only to adult irresponsibility in many quarters.

It does not seem to me extravagant to say that our nation needs in every phase of its life more citizens who care more about the values that make our character and our freedom.

What is true of the nation at large is true, in a very special sense, of the medical profession. We, too, need more men who care about—and are willing to work for—the preservation of the values that underline the freedom and the dignity of medicine in its service to the public.

The need for doctors who care about and for doctors who will work at such matters is dramatically clear. A look at the pages of your delegate's handbook is sufficient to demonstrate how many and how complex and how thorny are the problems that call for clear policy thinking and effective action by the medical profession. These are problems we must cope with—problems we must find some kind of workable solutions for—if medicine as we know it in the United States is to endure.

The problem of care for the aged and a workable means to pay for such care; the problem of changing patterns of practice, the relationship of the individual doctor to institutions, to groups and organizations of many sorts, and his relationship to the individual patient; the proper limits to the role of government in medical matters; the appropriate scope for voluntary health insurance; the fundamental question of licensure in our state—every one of these problems demands a solution—demands the best brains and effort the profession can bring to it.

It is a temptation at times to think a proper course for medicine would be one that was based squarely on opposition to change. It would be wonderful if our guiding policy could be as simple as this. We should see clearly at every point what we ought to be for and what we ought to be against.

Unhappily, this is not a realistic policy. It never has been in all of history, and it never will be.

Our task of policy definition is a much more difficult one. It is to work for the adaptation and adjustment of existing social patterns and institutions along lines that will serve the developing needs of the community and at the same time preserve the values that must be preserved if the character and soul of our profession are not to be destroyed.

As men of science and as citizens, then, we must be prepared to accept change of the right kind and resist change of the wrong kind. We must know what new programs and concepts it is essential to develop and what tested values it is essential to preserve.

It is not my task here today—thank heaven—to advise this House on the particulars of the great questions it has to consider. A right solution for each one of them will, I believe, require prudent acceptance of some new ideas and steadfast adherence to old and cherished principles.

More importantly, it will take recognition that effective policy in areas like these is the outcome of never-ending study and continuing adaptation of means to ends. A good illustration, perhaps, is our MSMA proposal for a single-license statute in Missouri. We have worked on this matter for years. Our original ideas have had to be modified to take account of the hard facts of political and social life. The measure we are now supporting in the General Assembly is a far cry from the thing we started with—the statute we believed would be best for all the people of the state. But still it remains a forward step—not the long stride we hoped for—but a measurable movement of progress in the right direction.

Our experience with this measure seems to me a good illustration of the kind of frustration we are bound always to encounter in this kind of public work—the difficulties we shall run into, the less-than-full success we must learn to expect.

But the work for this one bill has nevertheless been richly worth the effort. I feel entitled to say so because I participated in the effort from the start. And, when and if we achieve the passage even of this partial measure, then five or six years of hard and patient work will have its justification.

My conclusion, then, is simply a call on the profession, and particularly its younger members, to come forward in increasing numbers and with an increasing sense of dedication to help with the long—indeed endless—work of the Association as it continues to come to grips with new problems—and new aspects of old ones—problems that must be struggled with in the interest of medicine and of the people of Missouri. And though the struggle is never over, without it our most essential values would be lost. Only by keeping it up may we expect to play an honorable and effective part in the shaping of the future.

The Speaker referred the President's Message to the Reference Committee on Reports of Officers.

Ralph Perry, M.D., Kansas City, presented the Recommendations of the President-Elect as follow:

RECOMMENDATIONS OF THE PRESIDENT-ELECT

Mr. Speaker, Members of the House of Delegates: It is with some misgiving that I begin my term of office as President of the Missouri State Medical Association. I am mindful that I am following in the footsteps of a physician who has given some 30 years of dedicated service to this Association. I hope that I can carry forward the work of this Association and at the end of my term of office can enjoy a measure of the deserved respect we accord Dr. Francka.

My year as President-Elect has been a most enjoyable and busy one. I have enjoyed working with the Council and committees. I have been particularly pleased with the fine help and cooperation received from our Association's loyal staff.

In the next three days you will be faced with many decisions on many subjects important to medicine and to the health care of the people. The decisions you will make will be far-reaching in their effect on the future course of medicine. Perhaps the most important thing I can say to you at the outset is to urge that those decisions be made with calm deliberation, with full consideration of all facets of the problems and with full regard to the potential effects of your conclusions.

Dr. Perry presented the President-elect's Recommendations.

With Dr. Francka, I believe that the next 10 years will be critical ones for our profession and for the people who receive our care. It is conceivable that in 10 or 15 years medical practice as we have known it for the 108 years of this Association's history will be significantly changed. I believe it is up to us, as physicians, to guide the developments that inevitably must come toward the single objective of better care for the patient. I believe that we cannot ignore the trends, that we cannot simply yearn for "the good old days" and that we certainly cannot act in any selfish interest. Rather, we must take positive action to assure that the kind of medical practice that will exist 10 or 15 years from now will be the kind of medical practice that we believe will produce the greatest benefits for the patient.

Let us face our present situation realistically. The matter of closed panel systems and the free choice of physician is high on the agenda of this Session. The A.M.A. has taken cognizance of this problem. They have given us, as a constituent state association, what amounts to a mandate to determine our position in respect to this practice and to instruct our A.M.A. Delegates accordingly in order that a national policy can be determined. I want to urge you to review all of the various problems and alternatives in respect to closed panels and free choice of physician and then, after calm deliberation, develop a solution which you feel meets this question squarely, and one which our A.M.A. Delegates will be able to stand behind and defend if necessary.

Another matter with which we must deal is the corporate practice of medicine. I feel that it is the duty of this Association and others first to define what constitutes the corporate practice of medicine and to determine in what areas, if any, corporate practice is desirable as being within the public interest. And second, to draw the line as to when it becomes an arrangement for purveying physicians' services which may result in the ultimate deterioration of the traditional patient-physician relationship.

I feel, as the A.M.A. and your Council have felt, that these problems should be laid before you for your considered decisions. As your President during the coming year, I will do my best to carry through upon those decisions.

I would like now to devote a few minutes to Senate Bill 50, the Single Licensure Bill, which is pending before the Missouri Legislature. The Council, officers and staff of the Association and the House of Delegates have spent an indeterminable amount of time on this legislation. When this bill was introduced in the present Legislature in January, the Missouri Hospital Association strongly opposed the bill on the grounds that it would make board and room facilities of hospitals. After joint meetings with the Missouri Osteopathic Association and numerous conferences, a series of amendments were finally agreed upon which apparently satisfies the Hospital Association's objections and still accomplishes the original purpose of the bill. Hearings are to be held on this bill in the Senate Committee on Health and Public Welfare day after tomorrow and we have been assured that the Hospital Association will support this bill. Unless unexpected opposition develops, there is an excellent chance of passage. This will then give the people of Missouri one single high standard of competence for practitioners of the healing arts and will tremendously strengthen our position in respect to bringing action against those who attempt to practice medicine without proper license. I sincerely hope that when we are convened next year that this problem will be behind us.

There are other problems to which we must turn our attention. I believe, for example, that we should do more in the field of interprofessional relations, especially the development of a much needed code of conduct between the medical and legal professions. The need here is obvious when we bear in mind that 65 to 80 per cent of the litigation in our courts today requires some type of medical report or testimony and that the majority of personal injury cases are settled on a medical rather than legal basis. I believe also that we should develop codes with the other professions with which we come in contact—pharmacy, dentistry and the others.

I think it is time that we should examine the problems of increasing specialization in our profession. We should study the effect that present-day medical education is having toward over-specialization with a probable resultant decline in the training of general practitioners needed for all-round family care, particularly in the rural areas. There is no question but that we need specialists, but where are we heading in this area? At the present time there are about 6,000 senior medical students in this country and there are about 31,000 positions for residency training—specialist training. We have come in ten short years from 8,000 residency positions to the present 31,000. To explain a little further this present trend, we now have 51 kinds of specialists, sub-specialists or subdivisions of specialists, plus the family doctor. It has been aptly said that the present trend is to divide the patient into segments with a doctor for each, and no doctor for the patient. Considering these statements, are we, and our medical schools, and our hospitals, strongly encouraging our medical graduates to head for the type of practice the country needs least?

In bringing this matter to your attention, I am not simply carrying the banner of general practice. I repeat, we need well-trained specialists most certainly. However, I think that most of you will agree that by and large most of our people are cared for by general practitioners and it is our duty as an Association to encourage the proper training of these physicians.

It is my feeling, along with many others, that the inevitable trend of more and more specialization will be the mal-distribution of medical care, confused patients looking for the appropriate kind of physician, more tendency for self-medication and a wider door for various kinds of cultism.

Another problem which will take an increasing amount of our time, both as an Association and as individual physicians, is the problem of the aging.

Many others have pointed out that, through advances in medical science which have increased life expectancy, doctors have helped create the problem of an older population. We must also help in solving the problem.

I think there has been a tendency on the part of many to confuse, unknowingly or knowingly, the problem of the aging with the problem of health care for the aging. Despite Mr. Forand and others, I maintain that the problem of health care for the aging can be taken care of by the medical profession in concert with our local private institutions, if we are allowed the freedom to do so.

Medical science will develop the technics we need to deal with the special medical needs of older people. Physicians will continue to take care of their patients as they always have. I fail to understand why the idea has somehow arisen that doctors will deal differently with low income patients over 65 than they do with low income patients under 65. I believe that we already have the mechanisms, notably Blue Shield and Blue Cross, to deal with a large part of the problem of financing health care for the aging. These organizations have made great steps forward in providing protection for these people in just the past year, and greater advances will be forthcoming. Our local institutions—hospitals, clinics, nursing homes—are also making their contribution in new provisions for the aging, not only in care but also in providing feasible methods for meeting the cost of care.

I believe that the problems of health care for the older age groups, then, can be, and are being solved without governmental intervention. But there are other problems attendant upon aging that physicians must also help solve. Personal and social problems do exist.

Medicine can do a great deal to destroy arbitrary lines—the one at 65, for example—before which a man is young, after which he is old. We can do a great deal to help the aging toward a happy, useful life with other people. We can, and we should, in short, take the lead in solving the problem of keeping older people in the everyday fabric of society.

The fact that the Forand Bill has been introduced, and has gained the support of the people it has, I think points up two serious deficiencies among physicians today.

First is the lack of sufficient individual personal interest and activity in our medical organizations. Organized medicine is doing its best to let people know what medicine is accomplishing in the way of solving such problems as these. Organized medicine is attempting to show that physicians present a united front in affairs that affect the health care of the nation. But organized medicine cannot be truly effective in this unless all physicians, each and every one, support the effort and take an active part in it.

Organized medicine can be and should be a tremendous power in this country—a power for good. We are a profession, and as such, we have taken the responsibility for self-discipline.

By and large, I believe medicine handles this responsibility well. But at the same time we should not become blind to those cases in which discipline is necessary, nor should we shirk the task.

Many of us perhaps feel that we should be reluctant to take action against an individual, lest the reputation of physicians suffer. Let me say that I believe the reputation of medicine suffers far more from the lack of action than it does when we demonstrate to the public that we do keep our own house in order.

I believe, if medicine 15 years hence is going to retain the features we feel essential, that we will have to extend our principle of self-discipline. It does no good for you, sitting as a House of Delegates, to pass resolutions in favor of this practice and against that if, when you return home, these are forgotten and the situation prevails as before.

If we, as a profession, with the active participation of all physicians, decide that certain practices should be followed and others should be opposed as contrary to the best interest of our patients, then we must be willing, as individual physicians and local societies, to accept those policies, and actually to carry them out to the best of our abilities.

The second deficiency I think has been forcefully brought home to us by our experience with the Forand Bill, and with Senate Bill 50. It is the woeful lack of interest, activity and knowledge on the part of physicians generally in the area of civic and political affairs.

We are in politics whether we like it or not. The future of medicine, to a large extent, lies, not in our own hands as physicians, but in the hands of our representatives in Congress and the state legislatures.

Our first responsibility is to elect people to the legislature who have a sincere and sound interest in the health welfare of the public and who will serve as statesmen. Our second job is to maintain contact with them.

I know from my own experience that our Association staff does a good job for us all in the area of legislation. But they cannot do it alone. With the legislative problems that face the medical profession, it is essential that every doctor take an active part.

Do doctors really know how these things are done and how to do them? Do they know, personally, their own legislators? Our experience in recent years proves that by and large they do not. Time is becoming short —we must learn these things, learn them well and learn them quickly.

Mr. Speaker, members of the House, I believe we face an important decade in this nation—and more immediately, an important four days here in Kansas City. I urge that you make your decisions carefully, thoughtfully and for the long-range.

The Speaker referred the Recommendations of the President-Elect to the Reference Committee on Reports of Officers.

The report of the Secretary, John I. Matthews, M.D., Jefferson City, follows:

REPORT OF THE SECRETARY

On December 31, 1958, the official membership of the Association was as follows:

Status of Membership

Number of Members, January 1, 1958	3,692
New Members	214
Members Reinstated	5
Total	3,911
Members Dropped	8
Members Deceased	76
Members Transferred	62
Members Resigned	14
Total	160
Number of Members, December 31, 1958	3,751

The Committee on Nominations, which is appointed by the President from the House of Delegates, must submit nominations for the following officers:

Three Vice Presidents to fill the expired terms of James C. Cope, M.D., Columbia; M. T. English, M.D., Kirksville, and W. O. Finney, M.D., Chaffee.

Two Delegates and corresponding alternates to the American Medical Association to fill the vacancies created by the expiration on December 31, 1959, of the terms of Joseph C. Peden, Sr., M.D., St. Louis; Alternate, Dean Sauer, M.D., St. Louis; F. L. Feierabend, M.D., Kansas City; Alternate, Rolla B. Wray, M.D., Nevada.

The terms (two years) of the Councilors of the even numbered districts expire this year:

B. L. Murphy, M.D., Hannibal, Second District; Joseph C. Creech, M.D., Troy, Fourth District; C. G. Stauffacher, M.D., Sedalia, Sixth District; W. W. Tillman, M.D., Springfield, Eighth District; Ben M. Bull, M.D., Ironton, Tenth District. Delegates from these districts shall meet during the meeting, prior to the last day, and elect the Councilor for their District. The election shall be certified to the House of Delegates on a prescribed form which will be furnished. Lists of Delegates from the various districts will be available to the Councilors and may be checked for those present at the Registration Desk at the session.

The entire session will be held in Hotel Muehlebach. The House of Delegates will hold its first session on Sunday, April 5, at 1:30 p.m. in the Colonial Ball Room of Hotel Muehlebach. Reference committees will meet in committee rooms in the hotel following the session. The second session of the House of Delegates will convene at 4:30 p.m. on Monday afternoon in the Colonial Ball Room. The final session of the House will meet at 1:30 p.m. on Wednesday, April 8.

Registration will be open on Sunday, April 5, from 12:30 p.m. to 2:30 p.m., and from 8:00 a.m. to 5:00 p.m. on Monday and Tuesday, and from 8:00 a.m. to 12:00 noon on Wednesday. Registration will be in the Grand Ball Room, Hotel Muehlebach.

John I. Matthews, Secretary.

The Speaker referred this report to the Reference Committee on Reports of Officers.

The report of the Executive Secretary, Mr. Tom R. O'Brien, follows:

REPORT OF THE EXECUTIVE SECRETARY

The activities of the Association during the last year are covered in the report of the Council and reports of the committees. The executive secretary, the field secretary and the assistant editor attended these meetings and have attempted to carry out the instructions of the Council, officers and committees, members of which have spent many hours and devoted much attention to the affairs of the Association. The entire staff of the office of the Association has worked diligently for the welfare of the Association and I wish to express my thanks to them as well as the members of the Association who have assisted so much in carrying on our work.

The Past President's banquet drew a good attendance.

T. R. O'Brien, Executive Secretary.

The Speaker referred this report to the Reference Committee on Reports of Officers.

The report of the Treasurer, R. O. Muether, M.D., St. Louis, follows:

REPORT OF THE TREASURER

The report of the Treasurer is covered in the Financial Statement of the Association for 1958 which appeared in the March issue of Missouri Medicine. Since Delegates have had that issue of the Journal of the Missouri State Medical Association, the report is not repeated in these reports.

R. O. Muether, Treasurer.

The Speaker referred this report to the Reference Committee on Reports of Officers.

The report of the Committee on Scientific and Postgraduate Work, John A. Growdon, M.D., Kansas City, Chairman, follows:

REPORT OF THE COMMITTEE ON SCIENTIFIC AND POSTGRADUATE WORK

One facet of the work of the Committee on Scientific and Postgraduate Work, which it is hoped will reach at one time the majority of members in the state, is the program for the Annual Session. The Committee studied carefully programs of other years and programs of other medical meetings and is most hopeful that the program arranged for the 1959, the 101st Annual Session, will be welcomed by the membership. Attempt has been made to give wide variety in subject matter, in manner of presentation and to include audience participation. It has been geared to practical application to everyday practice. It is the sincere hope of the Committee that the Session is well attended and the value anticipated will be obtained from the meeting.

The Committee notes that a large number of medical meetings were held over the state this last year. Their programs seem to be of sufficient variety and quality for this Committee to feel that physicians over Missouri are being offered, through this source, a significant stimulation for keeping abreast of modern medicine. Some of these programs have been held in the metropolitan areas or at the medical schools. However, many others have been presented at regular meetings of county medical societies or district meetings throughout the entire state.

The Committee believes that an excellent, cooperative arrangement has been effected between this Committee and the education committee of the Missouri Academy of General Practice in working together with county medical society program committees to secure scientific programs for many local meetings. Cooperative postgraduate endeavors have also been successfully worked out and consummated during the year with the postgraduate medical education committee of the University of Missouri Medical School and with the Cardiovascular Section of St. Louis University School of Medicine.

The Committee wishes to thank those physicians who have given of their time and substance to appear on the many scientific postgraduate programs over the state this last year.

John A. Growdon, Chairman,
James G. Janney, Jr.,
John I. Matthews,
Hector W. Benoit,
M. Pinson Neal,
W. Paul Maddux,
J. H. Keim,
Charles O. Metz,
Wyeth Hamlin,
William R. Richardson,
Robert Smith.

The Speaker referred this report to the Reference Committee on Medical Education and Public Welfare.

The report of the Committee on Publication, Charles R. Doyle, M.D., St. Louis, Chairman, follows:

REPORT OF THE COMMITTEE ON PUBLICATION

The 55th volume of Missouri Medicine was completed with the December 1958 issue. During 1958 there were published 42 scientific articles, 5 grand round conferences, 5 case reports, 13 special articles, 14 editorials, 9 Curiosa et Trivia, 8 Capsule Clinics, 11 Washington, 5 Across Missouri, 8 Missouri Academy of General Practice, 5 Division of Health, 11 Missouri Medicine in Review, 11 Woman's Auxiliary, 11 President's pages, 11 Musings of the Field Secretary, 271 News items, 87 deaths, 159 new members, 99 Councilor District news, 30 From the Medical Schools, 13 articles on organization activities, 62 miscellaneous articles, 4 Committee on Laboratory Medicine, 30 book reviews, 5 Tuberculosis Abstracts, minutes of the House of Delegates and a roster. There were 709 pages of reading material, 683 pages of advertising and 108 pages of inserts.

Advertising in Missouri Medicine from January 1, 1958, to December 31, 1958, earned $58,553.72. Subscriptions of nonmembers amounted to $262.00 making $58,815.72 earned by the publication. The cost of production (printing and illustrations) was $42,672.72.

Charles R. Doyle, Chairman,
Richard H. Kiene,
C. G. Stauffacher,
R. O. Muether,
Ben M. Bull.

The Speaker referred this report to the Reference Committee on Medical Education and Public Welfare.

The report of the Committee on Defense, Charles E. Hyndman, M.D., St. Louis, Chairman, follows:

REPORT OF THE COMMITTEE ON DEFENSE

Of the two cases pending in 1958, one case was thrown out of court and the second one had exceeded the statute of limitations. There are no cases pending with the Committee at this time.

C. E. Hyndman, Chairman,
L. P. Forgrave,
Ronald Elkins,
Roland S. Kieffer,
Joseph G. Webster.

The Speaker referred this report to the Reference Committee on Reports of Officers.

The report of the Committee on Public Policy and Public Relations, R. O. Muether, M.D., St. Louis, Chairman, follows:

REPORT OF THE COMMITTEE ON PUBLIC POLICY AND PUBLIC RELATIONS

As has been the practice in recent years, the Committee on Public Policy and Public Relations has continued in a stand-by capacity, and the policy direction of Association activities in these areas has been a function of the Council. The chairman of the Committee, as a Council member, has been available to maintain liaison with the Committee in case of need for consultation.

The day-to-day execution of communications and public relations projects has been carried out by the staff and by our public relations agency under the direction of Mr. O'Brien.

Particular attention has been paid to improved communication with the membership of the Association. The Delegates' Handbook for this annual session—following the favorable response to the one issued last year—is an illustration of the effort being made to provide as fully as possible objective and informative materials as a basis for democratic determination of Association policy.

The Committee feels that this way of functioning is sound and that the result is maximum effectiveness at minimum cost.

R. O. Muether, Chairman,
W. D. Chute,
R. J. Crider,
Rolla B. Wray,
James E. McConchie,
O. B. Crawford,
H. W. Carrington,
J. J. Bredall,
John R. Dixon,
R. R. Lyle.

The Speaker referred this report to the Reference Committee on Reports of Officers.

The report of the Committee on Medical Education and Hospitals, Kenneth Glover, M.D., Mount Vernon, Chairman, follows:

REPORT OF THE COMMITTEE ON MEDICAL EDUCATION AND HOSPITALS

The Committee has held one formal meeting this year. This session at Jefferson City on Sunday, October 5, was attended by three members of the Committee, namely, Kenneth Glover, M.D., Mt. Vernon, Chairman, Ralph Coffey, M.D., Kansas City, and Doyle McCraw, M.D., Bolivar, members; H. M. Hardwicke, M.D., and Mr. Robert Bartel, Missouri Division of Health, Jefferson City; Mr. Ray McIntyre, St. Louis. Matters considered by the Committee follow:

The chairman suggested that a quick review be made of last year's report to the MSMA House of Delegates. This review brought forth further discussion of the nursing problem in Missouri, as to shortages and training programs. Dr. Glover reported on a new program in the Springfield school system for the training of practical nurses. Eighteen students are taking the course. Three hospitals in Springfield are cooperating with the public school system in the training program. It was pointed out that similar courses were being offered in Kansas City, St. Louis and Joplin. The program for registered nurse training, begun this fall at the State College in Cape Girardeau, will be watched with much interest. The course will lead to the Associate Degree in Nursing and will take two years to complete. Students taking the course will earn 75 hours college credit while they gradually increase, over the two year period, the courses in nursing and time spent at St. Francis or Southwest Missouri Hospitals in Cape Girardeau which are cooperating with the college in the program. At the end of the course, the trainees will be eligible to take the state board examination for registered nurses. Dr. Coffey reported on a proposal that has been considered in some Kansas City hospitals for a three year period training program for nurses. At the end of the first year a practical nurse diploma would be given; at the end of the third year eligibility for R.N. would be established.

The Committee discussed problems of medical education, first on an overall picture and, second, as related to Missouri University Medical School. Some members of the Committee feel that many medical educators today are promoting a philosophy which is increasing the complexity and time of training doctors. Because of this, good prospective doctors are being driven away from studying medicine. There needs to be more frank and considered re-evaluations given to medical curriculums with the goal in mind of decreasing the length of time for getting a basic medical education to practice medicine. In line with this, if necessary, the period of time in postgraduate training could be increased if later one elects to take up a speciality. In addition there needs to be more part-time clinicians teaching in medical schools. The Committee is most interested in the University of Missouri Medical School and particularly in its success in training general practitioners. In this respect the preceptorship program is being promoted fully by this Committee and at present ten preceptors are being solicited from rural Missouri to serve between January 19, 1959, and May 27, 1959. It was agreed to invite Dr. Roscoe Pullen, Dean of Missouri University Medical School, to meet with the Committee and discuss the program and problems at Missouri University—all with the idea of offering the assistance and cooperation of this Committee.

Dr. Richard H. Kiene conducted an instruction course.

More and more county medical societies are requesting scientific programs from faculty members of Missouri University Medical School. Most of these speakers are full time teachers and find paying their own expenses of travel to appear on programs over the state a bit difficult in view of the salaries they receive. It seems the University Medical School, at present, has no funds to give its postgraduate medical education committee to defray expenses of these faculty members to speak at medical meetings. The Committee recommends that medical societies where these speakers appear pay the expenses incidental to these appearances through the University Postgraduate Medical Education Committee.

Dr. Hardwicke and Mr. Bartel explained some of the problems relative to the approval of requests and plans for hospitals in Missouri regarding Hill-Burton federal funds. The matter of actual local needs, ability to support, available personnel and "know-how" for setting-up practical and functional hospital plans, was discussed. It was agreed that some outside, unbiased, informal source might well survey communities proposing to build hospitals. Dr. Hardwicke explained the function of the Advisory Council to the Division of Health on hospital construction and licensing. He felt that this council would be quite receptive to an offer of help from our Committee in considering the hospital construction program involving Hill-Burton funds in Missouri. The Committee voted to write and has written A. D. Markel, M.D., of Poplar Bluff, Missouri, Chairman of the Advisory Council, and offered the services of this Committee to the council.

Kenneth Glover, Chairman,
George J. L. Wulff, Jr.,
Doyle C. McCraw,
Ralph R. Coffey,
Harry K. Purcell.

The Speaker referred this report to the Reference Committee on Medical Education and Public Welfare.

The report of the Committee on Cancer, Marvin L. Napper, M.D., Springfield, Chairman, follows:

REPORT OF THE COMMITTEE ON CANCER

On December 7, in Jefferson City, a meeting of the Committee was called by the chairman for the primary purpose of receiving reports on the Cancer Conference sponsored by the United States Public Health Service for Region VI in Kansas City, Missouri, on November 20 and 21. Four members of the Cancer Committee attended the conference as official representatives of the Missouri State Medical Association, namely, George O. Miles, M.D., and E. Kip Robinson, M.D., Kansas City, John E. Lamy, M.D., Sedalia, and Charles E. Lockhart, M.D., Springfield.

REPORT ON KANSAS CITY CONFERENCE

Drs. Lockhart and Lamy reported on the Kansas City meeting saying that the meeting was called by the Public Health Service for Region VI covering seven states, all of which were represented with Public Health Service personnel making up about half of those in attendance. Others attending were physicians representing state medical association cancer committees of the region and the American Cancer Society. They said there was no set program and those attending were asked for subjects for discussion. Among things discussed were cancer registries, cancer detection centers, information centers, cytology work, rehabilitation work, excessive radiation, treatment of the marginal and economically indigent, the role of the Public Health Service in cancer work. It was the consensus of Dr. Lockhart and Dr. Lamy that the Public Health Service wished to take a more active part in cancer work and sought means of those at the meeting in determining how this could be done.

This report was discussed by all present which included Marvin L. Napper, M.D., Springfield, Chairman; George A. Carroll, M.D., St. Louis; John E. Lamy, M.D., Sedalia; Byron E. Watts, M.D., Jefferson City; Charles E. Lockhart, M.D., Springfield; John J. Modlin, M.D., Columbia; Mr. Ray McIntyre and Miss Helen Penn, St. Louis.

DISCUSSION

In discussion it was brought out that practicing physicians must continue to take the lead in cancer work; that this Committee had spearheaded the work in cytology which is being carried on by the Committee on Laboratory Medicine; that positive steps were of value not only in care of the patient but in protecting the private practice of medicine. Mass health examinations were discussed and the pilot screening tests conducted in Jefferson County by the Missouri Division of Health was discussed.

MASS EXAMINATIONS

Dr. Watts suggested that a time could be set aside each year in which physicians themselves would give mass examinations at a nominal fee, and with no fee for the indigent. Various possibilities in conducting such a procedure were presented by all present.

COMMITTEE ACTION

On motion of Dr. Modlin, it was voted that Dr. Watts be asked to write a recommendation on the feasibility of county medical society sponsored mass health examinations once a year. It was suggested that this be presented to members of the Committee for study and considered further at the next meeting of the Committee.

STATE-WIDE CYTOLOGIC SERVICE

The Committee commends the State Association Committee on Laboratory Medicine in its programs of professional education brought before county medical societies and hospital staffs relating to the organization and administration of a state-wide cytologic service for the study of cervical smears.

MARVIN L. NAPPER, Chairman,
JOSEPH L. FISHER,
GEORGE A. CARROLL,
GEORGE O. LAMY,
BYRON E. WATTS,
CHARLES E. LOCKHART,
JOHN J. MODLIN,
A. N. ARNESON,
E. KIP ROBINSON.

The Speaker referred this report to the Reference Committee on Medical Education and Public Welfare.

The report of the Committee on Medical Economics, A. P. Rowlette, M.D., Moberly, Chairman, follows:

REPORT OF THE COMMITTEE ON MEDICAL ECONOMICS

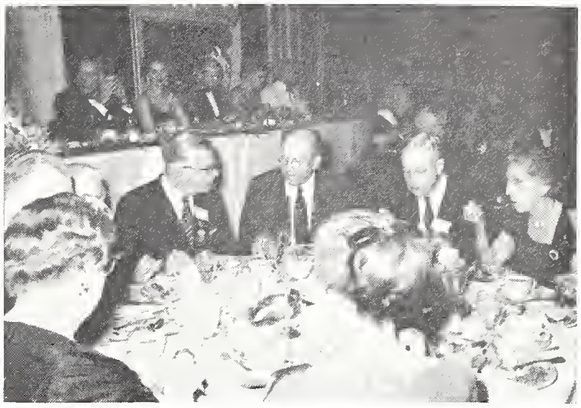
The Medical Economics Committee met twice during 1958 in preparation for the renegotiation of the Medicare contract in September.

The Committee had recommended that efforts be made to secure a no-fixed fee contract. However, the final action of the 1958 House of Delegates of MSMA was:

"That the Council be authorized and directed to negotiate a new Medicare contract with the Department of Defense to continue the program beyond the expiration of the existing contract September 30, 1958, and recommend continuation of a published fee schedule."

The negotiating team was composed of Drs. A. P. Rowlette, R. O. Muether and William C. Mixson, and Mr. T. R. O'Brien.

The negotiators were successful in raising some fees that had been considered to be too low by many Missouri physicians. However, a new fee schedule booklet was not issued because the great bulk of the fees was not changed. Instead a bulletin was sent to all MSMA members.



Past Presidents were seated together at the banquet.

The bulletin also gave details of the cutback made in the Medicare program that was effective the same day the new contract was, October 1, 1958. The reductions in civilian medical care made by the Defense Department were attributed to a lack of funds.

Evidently, Defense Department officials did not request enough money. Congress finally gave the department the 72 million dollars it had requested, but the estimated cost of a fully implemented program ran more than 90 million dollars.

The October cutback also had the unfortunate result of virtually eliminating the element of free choice of physician for dependents (normally wife and children) living with their serviceman sponsor. Physicians were required to establish that the dependent seeking medical care does not live with her sponsor. If she does live with him, the dependent must produce a permit authorizing civilian medical care. The permit is to be furnished whenever military medical facilities are deemed by the military commander to be insufficient. There also were other reductions of a more technical nature that applied to all dependents, whether living with their sponsor or not.

Medicare officials recently announced that further renegotiations were to be handled by mail.

The Committee was assisted last spring by 14 special members, representing different specialties. They met with their own groups and brought back recommended changes.

As is customary, the Committee wishes to present information regarding Blue Cross-Blue Shield in Missouri.

Missouri Medical Service (Blue Shield)

Membership, December 31, 1957	456,869
Membership, December 31, 1958	494,519
Reserve per agreement	$17.59
Reserve per participant	$ 6.92
Number of cases paid	105,798
Amount paid during year	$6,171,600

Kansas City Blue Shield Surgical-Medical Care

Membership, December 31, 1957	441,327
Membership, December 31, 1958	426,824
Reserve per agreement	$13.59

Reserve per participant	$ 5.21
Number of cases paid	201,518
Amount paid during year	$5,258,536.10

Blue Cross—St. Louis Plan

Membership, December 31, 1957	849,681
Membership, December 31, 1958	869,392
Reserve per agreement	$11.54
Reserve per participant	$ 4.51
Number of cases hospitalized	160,051
Number of days hospitalized	1,039,001
Average days stay per year	8.04
Amount paid during the year	$18,834,363.00

Kansas City Blue Cross Hospital Service

Membership, December 31, 1957	480,182
Membership, December 31, 1958	464,799
Reserve per agreement	$17.52
Reserve per participant	$ 6.69
Number of cases hospitalized	90,590
Number of days hospitalized	566,855
Average days stay per case	7.8
Amount paid during year	$10,312,685.22

Medicare

The Committee presents the following data relative to the Medicare Program from January 1, 1958, through December 31, 1958.

Total Number of Cases		*Amount Paid*
St. Louis	6,441	$525,510.00
Kansas City	4,641	$361,189.03

A. P. Rowlette, Chairman,
John R. Forgrave,
A. B. Smith,
R. E. Breuer,
George L. Hawkins,
Robert D. Duncan,
G. W. Winn,
E. D. Imes,
John T. Crowe.

The Speaker referred this report to the Reference Committee on Reports of Officers.

The report of the Committee on Maternal Welfare, James Keeler, M.D., Kansas City, Chairman, follows:

REPORT OF THE COMMITTEE ON MATERNAL WELFARE

The Committee met in Jefferson City, January 25, 1959. During the year frequent meetings of the counterpart committees of the gynecological societies in the Eastern and Western sections of the state were held where maternal mortality and other pertinent matters were discussed. At the meeting on January 25 the following were in attendance: James Keeler, M.D., Kansas City; Joseph Johnston, M.D., Springfield; William See, M.D., Columbia; A. C. Trueblood, Jr., M.D., St. Louis; Joseph M. Krebs, M.D., St. Louis; Eugene G. Hamilton, M.D., St. Louis; E. E. Wadlow, M.D., St. Joseph; H. C. Willumson, M.D., St. Joseph; Irwin T. Craig, M.D., Joplin; Forrest C. Long, M.D., Savannah; John I. Matthews, M.D., Jefferson City; H. M. Hardwicke, M.D., and Mr. Thomas Dundon, Missouri Division of Health, Jefferson City; Ray McIntyre, St. Louis. The Committee discussed a number of important matters and took definite action on some of these, as reported:

ANNUAL SESSION LUNCHEON

The Committee will have a luncheon program, Monday, April 6, during the MSMA Annual Meeting. At least two case reports of maternal deaths will be reviewed at this time. One of these is to concern anesthesia and the other, or possibly two others, to involve hemorrhage. The Committee recommends that when an obstetrician or gynecologist guest speaker appears on future programs at MSMA annual sessions he or she be scheduled on the same day as the luncheon.

MISSOURI DIVISION OF HEALTH

Dr. H. M. Hardwicke, acting director of the Missouri Division of Health, explained to the Committee some of the programs carried on by the Division of Health and various problems pertaining thereto. These included such activities as: well baby clinics, immunization projects, laboratory services, school health services, public health nursing services, premature centers and vital statistics. He expressed his desire for advice and assistance in these matters from the Missouri State Medical Association.

The Committee on Maternal Welfare held a luncheon meeting.

Dr. Hardwicke presented Mr. Dundon to discuss proposed changes in the birth and death certificates. The birth record forms of other states were presented and discussed, particularly that used in Kansas which has the check mark procedure of recording data. Following discussion, it was agreed that Dr. William Cassel, Jr., of the Missouri Division of Health, be asked to work out a revised suggested form for Missouri. This is to be presented to Ob-Gyn groups, Academy of General Practice groups and various county medical societies for suggestion before final adoption for use.

The following insertion on the death certificate was recommended to the Division of Health: "If deceased was female, was she pregnant at time of death or within the previous 90 days?" This will allow for more accurate reporting and investigation of maternal deaths.

4TH ANNUAL REPORT FOR FISCAL YEAR 1956-57

Dr. Trueblood presented the suggested maternal mortality report of the Committee for the fiscal year 1956-57 to be published in Missouri Medicine. Following a few changes the report was approved for publication.

The Committee believes that the readers of Missouri Medicine will find this report interesting and of practical value.

CASE REPORTS

It was again agreed that maternal death case reports would be submitted by the Committee to Missouri Medicine, to be published with an appropriate introduction.

PROGRAMS

The Committee on request will be pleased to present programs on "Maternal Welfare" before county medical societies, district medical meetings and Academy of General Practice postgraduate sessions at any time. It is suggested that this Committee offering be given as wide publicity as possible.

MEMBERSHIP OF COMMITTEE

It is recommended that the chairman and secretary of the maternal welfare committees of the St. Louis and Kansas City gynecological societies respectively be included as members of the Missouri State Medical Association Maternal Welfare Committee. They might be appointed as associate members each year by the President of the State Medical Association. Their inclusion in the membership of the State Association Committee, it is felt, will facilitate co-ordination of maternal mortality studies over the state and improve the effectiveness of the State Association Committee.

James Keeler, Chairman,
Joseph M. Krebs,
Joseph L. Johnston,
William See,
E. E. Wadlow,
P. V. Siegel,
H. C. Willumson,
A. C. Trueblood,
Irwin T. Craig,
J. J. Wimp,
Forrest C. Long,
Eugene G. Hamilton,
A. B. Sinclair.

The Speaker referred this report to the Reference Committee on Medical Education and Public Welfare.

The report of the Committee on Infant and Child Care, Daniel B. Landau, M.D., Hannibal, Chairman, follows:

REPORT OF THE COMMITTEE ON INFANT AND CHILD CARE

The Committee on Infant and Child Care met October 26, 1958, at the Coronado Hotel, St. Louis.

School health problems were discussed with Dr. Fred Hein, Ph.D., of the American Medical Association, who met with the Committee in place of Dr. Donald Dukelow who was not able to attend because of illness. Dr. Hein discussed the need for physicians' advice and participation in school health programs on all local and state levels. He stressed that the educators want the help of practicing physicians as well as that of full-time physicians, but are somewhat reluctant to take the initiative in asking for it. He emphasized that some of this reluctance might be caused by apparent indifference on the part of the physicians and it was agreed that steps should be taken to overcome this.

Dr. Hein stressed the value of cooperation between the educators, parents, public health personnel, voluntary health agencies, school nurses and physicians.

He recommended putting physicians on the formal programs of workshops to be held in various parts of the state. Examples were given of the programs in other states that had been found to be successful. It was found that school health workshops should start about 5:00 p.m. and run until 10:30 p.m. with a short time off for dinner. It has been found that this makes it easier to get doctor attendance.

Dr. Hein suggested meeting with school people to develop health policy pamphlets to be used by the schools.

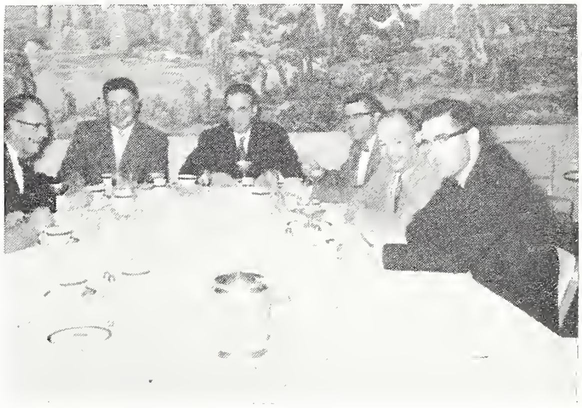
Some discussion was given to doctors being present at school athletic events to look after injuries and recommend whether injured players should reenter the contest.

Traffic accidents and deaths involving teen-age drivers were cited as increasing problems demanding attention and united efforts toward solutions. The Committee feels that this is a serious matter and should be included for discussion in the various school health workshops. It is felt that the State Association would do well to take the lead in combatting this problem.

The following actions were agreed to:

1. That the Council of the MSMA again recommend to county medical societies the appointment of a school health committee or chairman for each county.

2. That a state-wide meeting on physicians and schools be developed and held; that a small planning committee composed of representatives of the Missouri Division of Health, Missouri Department of Education, Missouri Dental Association and the Missouri State Medical Association meet under chairmanship of Dr. H. M. Hardwicke, Acting Director, Missouri Division of Health, and plan and call this state-wide meeting.



The Committee on Infant and Child Care met during the year.

Dr. Hardwicke explained that at present certain biologicals and medications were being furnished free to certain groups of people such as vaccines for preschool and school children, vitamins for specified groups, etc. He stated that he would like to establish a policy of having such biologicals and medications, furnished by the Division of Health, distributed only through physicians or their designated representatives. If such a policy were adopted the Division of Health would furnish doctors with free vaccines for the medically indigent patients to be given in their offices.

However, the Division of Health would reserve the right and approval to make immunization level surveys in communities from time to time. If such surveys showed the level to be below an established level, then the local physicians would agree to hold or to have held public immunization clinics to try and raise the level. None could be barred regardless of their economic position from getting immunization at such clinics.

The matter presented by Dr. Hardwicke was given a great deal of consideration. It was pointed out that in some areas the 9-point health program has been most successful in stimulating a high immunization level in the community. It was also stressed that this type of stimulation for getting immunizations offered a sound voluntary basis for developing parental responsibility for the child's health without resorting to public clinics. It is felt by many that the free health clinics would actually result in a lower level of community immunization as many wait for these free clinics and at the time of the clinic would not report for the immunizations. It was agreed that the matter presented by Dr. Hardwicke was of sufficient importance to take no action now, but to consider it again at the next Committee meeting.

A meeting on school health problems was called by Dr. Hardwicke at the Missouri Hotel in Jefferson City on March 8, 1959. Representatives of the Missouri State Medical Association were at this meeting.

Daniel B. Landau, Chairman,
H. E. Wachter,
R. J. LaDriere,
Guy N. Magness,
Leonard L. Davis, Jr.,
James J. Pascoe,
E. J. Schwartz,
J. N. Wiles,
James A. Kinder,
Gerald E. Hughes.

The Speaker referred this report to the Reference Committee on Medical Education and Public Welfare.

The report of the Committee on Health and Public Instruction, John McDaniel, M.D., St. Joseph, Chairman, follows:

REPORT OF THE COMMITTEE ON HEALTH AND PUBLIC INSTRUCTION

There has been no formal meeting of the Committee this year. No specific matters have been referred to the Committee for consideration. However, through the State Association headquarters office the Committee has carried on numerous activities relating to health and public instruction. These are listed as follow:

1. Speakers on health subjects furnished to women's clubs, PTA groups, lay health forums, civic clubs, schools and medical society auxiliaries.
2. Promotion of health exhibits at county fairs by local medical societies and their auxiliaries.
3. Promotion of radio programs on health education and on TV, where feasible, through local medical societies, particularly in the out-state area.
4. Furnishing of health information pamphlets and other resource material on request from individuals, groups and schools.

It is quite possible that closer working relationships with the health education department of the Missouri Division of Health and this Committee might materially aid the promotion of good public health in Missouri.

John McDaniel, Chairman,
J. Earl Smith,
E. A. Belden,
A. W. McAlester.

The Speaker referred this report to the Reference Committee on Medical Education and Public Welfare.

The report of the Committee on Constitution and By-laws, W. A. Bloom, M.D., Fayette, Chairman, follows:

REPORT OF THE COMMITTEE ON CONSTITUTION AND BY-LAWS

The Committee has not met since the last session. However, the Committee is aware of the action of the 1958 House of Delegates in appointing a special committee to study the make-up of Councilor Districts and delegate representation.

The Committee wishes to bring to the attention of the membership that any change in the number of Councilor Districts requires an amendment to the Constitution.

Article VII of the Constitution provides that there shall be ten Councilor Districts. The Constitution also provides in Article XI that amendments to the Constitution must lay on the table for one year following presentation to the House of Delegates. In addition, publication in Missouri Medicine is required on two occasions prior to final action.

Chapter III, Section 6, of the By-laws states that the House of Delegates shall divide the state into Councilor Districts specifying what counties each district shall include. Therefore, in order to place a county or counties into a different Councilor District only a by-law change is required. This may be acted upon at any annual session.

Chapter III, Section 2, of the By-laws states that each county society is entitled to one delegate for each 50 full paid members. This section further provides that each hyphenated society, which is composed of two or more societies, shall be entitled to at least one delegate from each of the counties of which it is composed.

W. A. Bloom, Chairman,
W. L. Allee,
P. W. Jennings,
H. M. Parker,
Kenneth V. Larsen.

The Speaker referred this report to the Reference Committee on Amendments to the Constitution and By-laws.

The report of the Committee on Fractures, Robert E. Funsch, M.D., St. Louis, Chairman, follows:

REPORT OF THE COMMITTEE ON FRACTURES

The Committee on Fractures had no formal meeting during the year. However, the chairman, upon receiving several communications from the Missouri Association of Chiropodists, Inc., relative to proposed changes in the law defining and restricting chiropody, contacted all Committee members by mail.

In order to obtain an accurate and complete description of the position of the chiropodists, they were asked to submit a letter outlining their position. Each of the members of the Committee received a copy of this letter and all members reported by mail. Different reasons were cited by members of the Committee but all were in opposition to the change as requested by the chiropodists.

The Committee reported to the Council that it was opposed to any change in the present definition of chiropody as defined in the Statutes of the State of Missouri. The Council approved the Committee report.

ROBERT E. FUNSCH, Chairman.
O. P. HAMPTON,
THOMAS G. OTTO,
PAUL W. MEYER,
RALPH K. EARP,
WILLIAM C. FRANCIS,
B. L. MURPHY,
OTIS E. JAMES,
GLENN L. MCELROY.

The Speaker referred this report to the Reference Committee on Medical Education and Public Welfare.

The report of the Committee on Eye Health, T. E. Sanders, M.D., St. Louis, Chairman, follows:

REPORT OF THE COMMITTEE ON EYE HEALTH

The Committee on Eye Health had nothing referred to it during the year and has held no formal meeting. The Committee is cognizant that legislation concerning anti-fireworks ordinances may be introduced in the present Legislature and will work toward passage of such legislation.

T. E. SANDERS, Chairman,
H. B. IVY,
PAUL G. WOLFF,
JOHN MCLEOD,
H. B. STAUFFER,
DICK H. UNDERWOOD,
MICHAEL F. PERNOUD,
D. E. EGGLESTON,
W. L. POST,
ROBERT S. MINTON,
W. J. SMITH.

The Speaker referred this report to the Reference Committee on Medical Education and Public Welfare.

The report of the Committee on Control of Venereal Disease, Edwin M. Powell, M.D., Springfield, Chairman, follows:

REPORT OF THE COMMITTEE ON CONTROL OF VENEREAL DISEASE

The Committee on Control of Venereal Disease has not met this year.

Two projects were recommended by the Committee last year. One was that an article or articles be written for publication in MISSOURI MEDICINE. These are in process.

The second item was the Committee's recommendation that the pilot study covering a new morbidity reporting system for venereal disease conducted in the St. Louis area be expanded to include the Kansas City area, provided the Committee on Laboratory Medicine of the Association would assist the Division of Health in establishing the program in that area. Up to the time of this report, the Committee on Laboratory Medicine has not advised this Committee relative to this program.

EDWIN M. POWELL, Chairman,
E. M. CANNON,
A. W. NEILSON,
R. J. MURPHY,
ROBERT B. BRISTOW,
JOHN E. BYRNE.

The Speaker referred this report to the Reference Committee on Medical Education and Public Welfare.

The report of the Committee on Diabetes, Henry E. Oppenheimer, M.D., St. Louis, Chairman, follows:

REPORT OF THE COMMITTEE ON DIABETES

The Committee on Diabetes has continued to lead in the formation and progress of the newly formed Missouri Diabetes Association. A dinner meeting was held in conjunction with the Missouri State Medical Association meeting on April 14, 1958. The constitution and by-laws were discussed and tentatively approved, and officers and councilors were elected. This organization will serve as a link between the American Diabetes Association and the Missouri State Medical Association.

A meeting of the council was held in Columbia on October 11, 1958, at which time a membership drive and a program were discussed.

A meeting of the entire Missouri Diabetes Association was held in St. Louis on January 22, 1959, in order to have a general get-together and further plan the annual meeting to be held in April 1959. This dinner meeting, as in the past, will be a joint function with the Committee on Diabetes and will be held during the MSMA meeting in Kansas City.

The Committee on Diabetes held a dinner meeting during the session.

The Kansas City Clinical Diabetes Society is in the process of rejuvenation. New officers have been elected, and at a meeting on November 17, 1958, the constitution and by-laws were discussed.

SCIENTIFIC MEETINGS, PAPERS

At the Missouri Diabetes Association annual meeting, Dr. E. Perry McCullagh, chief of the Endocrine Section of the Cleveland Clinic, presented a paper on "Recent Trends in the Treatment of Thyroid Disease."

A panel discussion of "The Use of Insulin in Diabetes" was part of the MSMA annual session. Drs.

Thomas Burns, Columbia; Lucien Ide, St. Joseph; H. H. Lurie, Springfield; Henry E. Oppenheimer, St. Louis, and Virginia Peden, St. Louis, participated.

Dr. Ralph A. Kinsella, Jr., St. Louis, presented a paper at the St. Louis Clinical Diabetes Society's annual meeting in April 1958. This was entitled "Action of Insulin Injected Into the Portal System."

MEETINGS WITH NON-PROFESSIONAL GROUPS

Mr. Bill Talbert, New York, tennis champion and a diabetic patient, was the speaker on November 14, 1958, at the St. Louis Diabetes Association meeting. He spoke on the subject "Winning With Diabetes."

A panel of nationally known physicians in diabetes work spoke at the St. Louis Diabetes Association meeting in January 1959. These men were Drs. Charles H. Best, Toronto, Canada; Garfield G. Duncan, Philadelphia; Robert Jackson, Columbia; John A. Reed, Washington, D. C., and E. Paul Sheridan, Denver.

Dr. Oppenheimer presided at the Diabetes dinner.

Dr. Henry E. Oppenheimer spoke at a meeting of the Lay Society of Greater Kansas City in November 1958. His title was "Recent Trends in Diabetes."

POSTGRADUATE COURSE

The seventh annual postgraduate course of the American Diabetes Association was held in St. Louis on January 21-23, 1959, and was highly successful. There were well over one hundred registrants as well as many students, interns and medical residents in attendance. Codirectors were Drs. William H. Olmsted and Henry E. Oppenheimer, St. Louis, and the local committee consisted of ten physicians from the University of Missouri, St Louis University and Washington University schools of medicine. Thirteen Missouri physicians were among the faculty.

DETECTION DRIVES

Successful diabetes detection campaigns were carried out in Kansas City and St. Louis. The latter area is interesting as it is one of three centers singled out in 1958 by the American Diabetes Association in a research project to determine the relative efficacy of Benedict's solution and glucose oxidase in screening for the unknown diabetic person.

Many county and regional societies had limited detection campaigns as well as the two American Diabetes Association affiliates mentioned before.

CAMPS

There were two camps for diabetic children in Missouri in 1958, in Swope Park, Kansas City, and Camp Lions Den, St. Louis.

AMERICAN DIABETES ASSOCIATION

Dr. William H. Olmsted was awarded a Banting Medal, the highest honor given by the ADA. This was given at the annual meeting in June 1958, upon his retirement as treasurer of that organization. It was the first time that an officer other than president was ever awarded the Banting Medal.

Dr. Henry E. Oppenheimer was reelected chairman of the assembly of delegates and state governor of Missouri for the American Diabetes Association.

HENRY E. OPPENHEIMER, Chairman,
J. BRUCE LEMMON, JR.,
H. M. GILKEY,
CHARLES M. LAMKE,
LUCIEN W. IDE,
WILLIAM H. OLMSTED,
ROBERT E. KOCH,
RALPH S. CASFORD,
JOHN H. WALTERSCHEID.

The Speaker referred this report to the Reference Committee on Medical Education and Public Welfare.

The report of the Committee on Laboratory Medicine, Victor B. Buhler, M.D., Kansas City, Chairman, follows:

REPORT OF THE COMMITTEE ON LABORATORY MEDICINE

The Committee on Laboratory Medicine has met on three occasions during the last year and all members of the Committee were in attendance.

On May 4, 1956, the performance of routine laboratory examinations by the Laboratories of the Division of Health was discussed by the Acting Director of Health and some of his associates. The time of the laboratory personnel and the funds appropriated for the laboratory were being consumed in the performance of these routine procedures and were not available for more pressing public health activities. Most of the requests for routine serologic testing are from manufacturing concerns as a preemployment examination and are not in the nature of a public health program. Since adequate private facilities exist that are able to perform these laboratory procedures, it was suggested that the Division of Health discontinue performance of the routine blood serology for syphilis except for the premarital serologic examinations which are required by law. This suggested action was presented to the Council of the Missouri State Medical Association and approved. A letter is being sent by the Acting Director of Health to inform the members of the Missouri State Medical Association of this action as requests for routine examinations are received. Discontinuance of all diagnostic laboratory procedures by the Division of Health Laboratories not involving the public health is an ultimate goal. Discontinuance of premarital serologic examinations was also suggested and at the appropriate time, the Laboratory Committee with advice and approval of the Council, will assist in preparing appropriate legislation to repeal the statutes relating to premarital serologic examinations.

The cytology educational program instituted a year ago and announced to the members of the Missouri

State Medical Association continues to be active. More than 25 per cent of all Missouri physicians have attended these educational programs which outline the indications for cytologic examination, precautions to be taken, manner of obtaining and preserving the specimen and the interpretation of the reports. This program should reach every practicing Missouri physician and is still available to county and hyphenated county medical societies and to the medical staff of various hospitals as requests are received by the Association office.

VICTOR B. BUHLER, Chairman,
ANGELO LAPI,
FRED C. COLLER,
J. OWEN BLACHE,
JOSEPH E. FLYNN,
HOLLIS N. ALLEN.

The Speaker referred this report to the Reference Committee on Medical Education and Public Welfare.

The report of the Committee on Civil Defense, Carl D. Siegel, M.D., Sedalia, Chairman, follows:

REPORT OF THE COMMITTEE ON CIVIL DEFENSE

Civil Defense effort during 1958 primarily has been planning and paper work with legislation still pending at both the state and national level. The results, so far, are contained in Missouri's Survival Plan released last October by Governor James T. Blair.

In Public Law 606, passed last session by Congress, the entire concept of Civil Defense was changed. Before, it was held that Civil Defense primarily was the responsibility of the states and their political subdivisions.

Now under the new federal law Civil Defense is established as a joint federal-state-local responsibility. It authorizes federal authorities to help the states and their cities with the administrative and personnel costs. Appropriation measures to do this are under consideration now in Congress. Law 606 also authorizes the federal government to help pay training and personal equipment costs at the lower levels, plus a large program for the purchase and distribution of radiologic measuring instruments.

In conjunction with Law 606, Congress also approved President Eisenhower's Reorganization Plan No. 1 of 1958, which became effective last July 1. This plan merged the old Federal Civil Defense Administration and Office of Defense Mobilization into the Office of Civil Defense Mobilization (OCDM). This helped clear up areas of misunderstanding and establish fixed lines of authority and responsibility in the field of nonmilitary defense.

Three of the major programs being put into operation by the OCDM are: continuity of government; radiologic defense, and survival planning.

Operational survival plans (similar to Missouri's) have been completed in nearly 40 states and many metropolitan target areas, and work is being pushed to complete the rest of a total of 195 plans. All of the plans will be completely linked to the National Plan for Civil Defense and Defense Mobilization.

Missouri's Mobilization Plan now is being reviewed to make a few refinements. This also applies to the section dealing with emergency medical care. The entire plan also cannot be fully operative until certain changes are made in the state law. Legislation to do this has been introduced in the General Assembly. These proposed changes are to be reviewed by the Civil Defense Committee.

The Committee met January 18, 1959, in Jefferson City to consider medical care aspects of the Mobilization Plan. Under Annex O, Appendix 2, Missouri State Medical Association is charged with the appointment of a Chief of Medical Care Services, who would direct physicians in the event of a disaster—either natural or man-made.

Many of the details of Appendix 2 remain to be clarified. The Committee has been requested by Civil Defense to do this. So at this time even though final details still remain to be decided, it can be predicted that Missouri's private physicians will be responsible for the great bulk of emergency medical care in the event of any type of disaster.

Dr. Carl D. Siegel, Committee chairman, also has been working with Civil Defense in the preparation of a model county medical care service plan for Missouri.

Dr. Siegel also attended the Ninth County Medical Societies Civil Defense Conference November 8-9, 1958, in Chicago. It is sponsored each year by the Council on National Defense of the AMA.

CARL D. SIEGEL, Chairman,
WILLIAM C. ALLEN,
H. D. STEINBECK,
CARROLL C. HUNGATE,
A. S. BRISTOW,
JOHN R. FORGRAVE,
J. M. CANELLA,
CURTIS H. LOHR,
R. NED WHITE,
GEORGE E. THOMA,
GEORGE L. WATKINS,
JOHN A. GRIFFITH.

The Speaker referred this report to the Reference Committee on Reports of Officers.

The report of the Committee on Study of Cardiac Disease, Earl L. Loyd, M.D., Jefferson City, Chairman, follows:

REPORT OF THE COMMITTEE ON THE STUDY OF CARDIAC DISEASE

A meeting of this Committee was held in St. Louis on Sunday, November 23, with the following people present: Earl L. Loyd, M.D., Jefferson City; Wm. I. Park, M.D., Springfield; E. L. Shrader, M.D., St. Louis; A.M. Estes, M.D., Cape Girardeau; W. J. Gillespie, M.D., St. Louis; E. E. Glenn, M.D., Springfield, all members of the committee; Mr. William Green, Executive Director, Missouri Heart Association, Columbia; Mr. Ray McIntyre and Miss Helen Penn, St. Louis.

A request from the rheumatic fever and congenital heart disease committee of the Missouri Heart Association was presented. This was a proposal that a rheumatic fever survey be conducted through the physicians of the State of Missouri to determine the amount of rheumatic fever in the state. The major objective of such a survey would be to alert the doctors of Missouri that rheumatic fever is still a serious problem and, in addition, helpful information regarding incidence would be obtained. The Heart Association committee felt that the only acceptable method for carrying out such a survey would be through the cooperation and support of the State Medical Association. Therefore, the proposal was brought to this Committee for study and recommendation to the Council of the MSMA.

A similar rheumatic fever survey was made in Minnesota in 1955 to good effect using a questionnaire technic through the physicians of the state.

QUESTIONNAIRE

The proposed following questionnaire based on the Minnesota questionnaire was presented:

"Questionnaire for Rheumatic Fever and
Congenital Heart Disease Survey

"To: All Physicians in Minnesota

"Please complete the following queries and return this sheet to the Minnesota State Medical Association in the attached return addressed envelope.

"1. How many patients in your practice are you now treating for active rheumatic fever in the past twelve months?.................

"2. How many patients are under 15 years?...........

"3. How many individuals in your practice are you now giving some form of prophylaxis to, to prevent the recurrence of rheumatic fever?..............

"4. What kind of prophylaxis are you using?..........

"5. How many unequivocal cases of congenital heart disease are currently under your observation at this time?.............

"Signed ..........................M.D.

"Please check type of Practice:
"Internist........
"Pediatrician........
"General........
"Surgeon........
"Other........

"Please answer at once."

COMMENTS

Mr. Green gave some figures from the 1950 survey conducted in Minnesota: 3,063 questionnaires mailed out, 1,556 returned, 2,297 active cases reported by 579 M.D.'s, 1,434 cases under 15 years reported by 644 M.D.'s. Prophylaxis was reported being given 3,323 patients. This made 7.37 per 1,000 population overall, 1.17 for children under 15, and 1.05 for prophylaxis treatment. There were 1,341 doctors who reported 2,297 cases of rheumatic fever. It was pointed out that projecting this data to Missouri would indicate approximately 4,000 cases in Missouri.

It was decided that should the survey be made, it would be done by the Missouri Heart Association, following approval by the Committee and the Council of MSMA. It was felt that results of the survey should be made available through MISSOURI MEDICINE with the purpose of alerting physicians and making available information of facilities for aid to patients. After discussion of the lack of information on facilities in the state by the average physician, it was suggested that a sixth question be included in the questionnaire concerning a desire for information by physicians.

On motion of Dr. Glenn, it was voted that a rheumatic fever survey be made in Missouri.

On motion of Dr. Gillespie, it was voted that a sixth question be included to read: "Would you like information regarding clinical and laboratory facilities in Missouri, as for catheterization and angiocardiography, for confirming your diagnosis of rheumatic fever and congenital heart disease suspects?"

PROPHYLACTIC PROGRAM IN STATE

Dr. Loyd asked Mr. Green to review the prophylactic program in the state. Mr. Green said that Kansas City and six adjoining counties and several other counties in the state were carrying out such a program; that applications were made to the Heart Association in the Kansas City area and physicians receive drugs for the program. He said that the counties in some cases carry the expense of the treatments. Drug of choice and indigency of patients were discussed. On motion of Dr. Glenn, approval of long term prophylactic treatment for rheumatic fever was voted.

GREENE COUNTY BROADCASTS

Mr. McIntyre read a letter from the Ozarks Regional Heart Association asking approval by the Committee of a series of tape recorded broadcasts on rheumatic fever and heart diseases. Dr. Glenn discussed the program, explaining the cooperation of the radio stations and the reviewing of the scripts by physicans. A tape of the first series proposed was played for the Committee. On motion of Dr. Shrader the Committee approved the broadcasts with the understanding that each script would be reviewed by members of the Ozarks Regional Heart Association and members of the Greene County Medical Society.

PILOT SCREENING SURVEY

Mr. McIntyre reported on the pilot screening survey conducted by the Division of Health in Jefferson County. He said that approximately 5,000 persons over the age of 39 were screened between July and November. He explained that most of the administrative work was done by volunteers and that a physician from the Division of Health was in charge. He presented a chart showing a sampling of the results and a listing of the tests made, which included only one lead in the electrocardiogram. He read sample letters that were sent to persons examined and to doctors whom persons had designated. He said that the feelings of the physicians in the county were mixed but that they felt there were too many false positive readings, especially for anemia, and in all, that the big question remained as to whether the results of the survey justified the large expense in both time and money.

ADDENDUM

The Committee chairman appeared before the Council of the State Medical Association on Sunday, December 14, to discuss the Committee's actions of November 23.

The Council approved the survey proposal and suggested that the results of the survey be published in MISSOURI MEDICINE.

The survey forms, with a covering letter, from the Missouri Heart Association should be in the hands of all members of the Missouri State Medical Association by the time this report is considered by the House of Delegates.

The proposal on tape recorded heart programs to be approved through the Greene County Medical Society and made available to Missouri radio stations was approved by the Council.

EARL L. LOYD, Chairman,
E. LEE SHRADER,
WILLIAM I. PARK,

E. J. McINTIRE,
A. M. ESTES,
G. R. HUDSON,
W. J. GILLESPIE,
C. A. POTTER,
E. E. GLENN,
MARTIN J. MUELLER.

The Speaker referred this report to the Reference Committee on Medical Education and Public Welfare.

The report of the Committee on Rural Medical Service, A. E. Spelman, M.D., Smithville, Chairman, follows:

REPORT OF THE COMMITTEE ON RURAL MEDICAL SERVICE

The Committee met in St. Louis, January 11, 1959. The following people were in attendance: A. E. Spelman, M.D., Smithville; W. J. Shaw, Sr., M.D., Fayette; B. J. Bass, M.D., Salem; Charles H. Lewellen, M.D., Louisiana; C. A. McBurney, M.D., Slater; A. J. C. McCallum, M.D., Aurora; L. M. Garner, M.D., Missouri Division of Health, Jefferson City; John P. Wells, M.D., District Health Officer, Sedalia; R. V. Snyders, M.D., St. Louis; W. J. Stewart, M.D., Columbia; Miss Helen Penn and Mr. Ray McIntyre, St. Louis. At this session the Committee considered a number of important matters, reported as follows:

RURAL HOSPITALS

Dr. Spelman outlined some thoughts in regard to hospital locations saying that some persons think hospitals should not be built outside of urban areas, that only a 300 bed hospital can be run efficiently with others thinking that the size should be 600. He pointed out that the Hill-Burton Law was basically for construction of rural hospitals but that staffs are a problem and gave examples of hospitals that had not been able to be staffed.

PRESENT HOSPITAL CONSTRUCTION

Mr. McIntyre reviewed present hospital construction in Missouri, listing hospitals recently built at Houston, West Plains; under construction at Jefferson City, Brookfield, Columbia, Sedalia, Fulton; to be constructed soon at Doniphan, Aurora, Carrollton, Sweet Springs, Butler, Eldorado Springs, Fredericktown; financial drives on at St. Charles, Hannibal; bonds voted for county hospitals at Fayette, Potosi, Unionville; and bonds defeated at Rolla, Waynesville, Piedmont, with a hospital being planned at Sullivan.

DISCUSSION

Various points brought out in the discussion included the fact that often rivalry between towns prompts a desire for hospitals; that a number of hospitals in a bordering state are not being used because they cannot be staffed; that each community is a different problem as to hospital need and possibility; that policies of boards of trustees are paramount in determining standards of hospitals; that certain accreditation requirements have tended to build up hospitals and medical dynasties in some places.

HOSPITAL STANDARDS

Dr. Stewart explained that the American College of Surgeons is studying the needs of hospitals to determine a standard for approval, not accreditation.

STANDARDS FOR LOCATION OF HOSPITALS

In a discussion of the standards for use in determining the location of future hospitals, the following points were brought out: (1) mileage from another hospital should not necessarily be a yardstick; (2) possibility of obtaining and retaining a staff, not necessarily all resident, other hospitals in the area, industrial needs of the community; (3) trend may be to place hospitals in urban areas to avoid possible mistakes in placing them in rural areas; (4) present hospitals should be re-evaluated in view of the new hospital licensing law and changes in communities.

CRITERIA SELECTED

The following criteria for selection of locations were approved by the Committee:

1. Medical need, with priority given on population.
2. Availability of medical staff, including part time staff, and parimedical help.
3. Economic ability of the community to maintain the hospital; including that a community which can do its own financing without Hill-Burton money should do so.

The Committee on Tuberculosis sponsored a panel presentation.

DIVISION OF HEALTH

Drs. Garner and Wells discussed the following problems of the Division of Health in which it would like to have advice and cooperation of the medical profession:

1. Tuberculosis control, including the use of the two mobile units; the bill to be introduced to institute compulsive treatment and isolation; on furnishing drugs for the treatment of tuberculosis.
2. Laboratory work of the Division, with presentation of a letter to go to physicians explaining the cut-back in that work, which will continue to include all epidemiologic work.
3. Diabetic detection work in which screening is being done.
4. Immunization programs in which the Division is charged with the responsibility of immunization but has difficulty in carrying this out without encroachment on the private practice of medicine. It was pointed out in this connection that the Division is a public health service, not an indigent service.

5. School health program, which is now in the hands of the Committee on Infant and Child Care.

6. Premature Centers and how much they are used and whether more are needed, or those now in existence not needed.

DISCUSSION

No definite actions were taken but in the discussion it was brought out that the Division of Health could do a great service in promoting education, both to the laity and the profession, in health matters; that the health of the people in Missouri is a joint responsibility of the physicians in private practice and of the Division of Health. It was suggested that such things as river pollution control, mosquito control, examination of food handlers, school sanitation and venereal disease control were important public health activities. It is thought by the Committee that some of these matters should be considered by the Council and an expression of their opinions offered the Health Division.

PHYSICIAN PLACEMENT

A number of good locations for general practice in Missouri, which are listed on the Committee's recommended location sites maintained in the State Association headquarters office, were specifically discussed in view of their seeming attractiveness but yet no takers. These places have good hospital facilities, above average schools and other community facilities and businesses. One big difficulty in physician placement seems to be that a large number of young physicians wish to restrict their work to surgery and are unwilling to combine it with some general practice. However, constant efforts are being exerted to place doctors in needful areas over the state. Reasonable success has been accomplished in this respect although problems as mentioned remain as stumbling blocks. The Committee is watching with hopeful anticipation the decisions of medical graduates of Missouri University as they finish military service and begin deciding their future medical course.

STATE CANCER HOSPITAL

The admittance procedure at the Ellis Fischel State Cancer Hospital was outlined, as admittance only on order of a county court and that county courts were supposed to issue such an order only on approval from a physician. It was stated that the hospital operates at a $20 a day cost per bed including professional staff, that the average occupancy is 96 of the 104 bed capacity, that the average waiting period is two to three weeks although emergencies are cared for, that 7,200 outpatients are seen during a year. The Committee feels that this hospital is being operated efficiently and effectively and merits the commendation of the medical profession of our state.

A. E. Spelman, Chairman,
W. J. Shaw, Sr.,
B. J. Bass,
John F. Pearl,
Charles H. Lewellen,
C. A. McBurney,
Jack Mullen,
A. J. C. McCallum,
Charles Lichty.

The Speaker referred this report to the Reference Committee on Reports of Officers.

The report of the Committee on American Medical Education Foundation, James P. Murphy, M.D., St. Louis, Chairman, follows:

AMERICAN MEDICAL EDUCATION FOUNDATION

The American Medical Education Foundation Committee used a personal solicitation approach in its campaign in 1958 instead of the usual mail approach. However, the result does not seem to have justified the additional effort.

While the final national results have not been tabulated as yet by the A.M.E.F., Missouri's contribution probably will about equal the 1957 total of $9,127.

This figure, of course, does not include the amount given directly to medical colleges through alumni drives. This figure normally is not available until much later in the spring. The 1957 alumni total showed an impressive gain over the 1956 total. The 1957 total was $72,821, as compared with $41,994 in 1956. It is hoped the 1958 total will be as good.

A.M.E.F. reports that its preliminary total for the 1958 national campaign shows a gain of nearly $150,000. The 1958 total stands at $1,133,654, as compared with $984,884 in 1957. In 1957 the nation's physicians also gave another 3 million dollars directly to the schools of their choice, bringing their total gifts to slightly more than 4 million dollars that year.

Several of the states responsible for the gain in the 1958 A.M.E.F. total indicated it was because they had adopted a compulsory assessment system.

Arizona showed a gain of 38 per cent by turning to businessmen. Those people, principally pharmacists, that normally feel obligated to give physicians Christmas gifts were encouraged to make contributions instead to A.M.E.F. A.M.E.F., in turn notified the physician of the gift in his honor

In an attempt to get better participation and liaison with the states, the AM.E.F. has established a regional system. Missouri is one of seven states in the North Central region.

At the first regional meeting held during the 8th annual State A.M.E.F. Chairmen's meeting in Chicago, January 24-25, Dr. James P. Murphy, Missouri's chairman, served as chairman. Another regional meeting is planned for later this spring.

A.M.E.F. also hopes the regional meetings will help give more uniformity between the states and give new state chairmen a place to turn for advice. The other states in Missouri's region are Ohio, Indiana, Illinois, Michigan, Wisconsin and Minnesota.

The A.M.E.F. Committee is happy to report that in the academic year 1957-1958 the nation's medical schools had the largest first year class enrollment on record. There were 8,030 first year students attending the 85 medical schools. The total enrollment during that academic session was 29,473, with nearly 7,000 in the graduating group. Seventy-eight of the 85 schools were approved 4-year schools; four were approved 2-year schools, and three were still developing their programs. The new ones were the University of Florida at Gainesville, Seton Hall College of Medicine and Albert Einstein College of Medicine.

The graduating class of 1958 was nearly 50 per cent larger than 1931, when 4,735 physicians were graduated. However, the pressure is on the profession to increase this number even more. As we know, the federal government has served warning on the profession to find ways to do this. Otherwise it will enter the field even more than it already has by participating through the use of grants and such.

The Woman's Auxiliary gave a buffet dinner

The ratio of applicants to admissions in 1957-58 was 8,030 to 15.791 or 1.96 per admission. The total number of applications filed by applicants was 60,946, or 3.9 applications per applicant.

An unfortunate trend is the decreasing number of persons wishing to study medicine. The number has fallen more than 53 per cent in the last nine years. That year (1948) 24,242 individuals were seeking admission to medical schools, as compared with 15,791 in 1957.

On the other hand, the number of foreign medical school graduates in United States hospitals is growing.

In 1958 there were 7,622 interning in hospitals as compared with 6,033 in 1956. The 7,622 came from 90 countries and served in 821 hospitals. Fortunately, the Educational Council for Foreign Medical Graduates now is functioning. Its aim is to verify credentials of graduation of the foreign student, determine that he has a basic knowledge of English, and determine that he possesses a degree of knowledge in medicine essentially equivalent to that required of graduates of our own approved schools prior to their eligibility for internship.

The Committee believes the following data which also is from the Annual Report on Medical Education in the U. S. and Canada (J.A.M.A., November 15, 1958, pp. 1459-1550) is extremely important. It points up the heavy reliance of our medical schools on government financial aid:

1. Income from tuition, 6.4 per cent.
2. Income from endowment, 6.1 per cent.
3. Income from general university funds and expenses provided by universities, 16.7 per cent.
4. Income from non-governmental grants for research and teaching, 17.1 per cent.
5. Income for teaching expenses paid by hospitals, clinics, or medical service funds, 6.8 per cent.
6. Miscellaneous income, 1.1 per cent.
7. Government grants for research and teaching including federal (27.9 per cent) and state (17.9 per cent), 45.8 per cent.

The figures, of course, represent a composite picture of all funds and all schools.

The Committee feels the individual physician should take an increasing interest in the problem of the nation's medical schools, not only in the financial problems, but those of staffing. If this is not done, the government inevitably is going to take over the job.

The Committee wishes to thank the county committee chairmen and their committee members who carried the full load of the personal solicitation drive in 1958.

James P. Murphy, Chairman,
Hugh E. Stephenson,
Donald F. Gose,
T. Reid Jones,
H. E. Petersen.

The Speaker referred this report to the Reference Committee on Medical Education and Public Welfare.

The report of the Medico-Legal Committee, E. A. Smolik, M.D., St. Louis, Chairman, follows:

REPORT OF THE MEDICO-LEGAL COMMITTEE

The Medico-Legal Committee, a special committee of the Council, was the result of a request made by the Missouri Bar for a joint committee to discuss mutual problems between the two professions.

The special 7-man committee was named early in 1958 and has held several meetings. The committee considered various inter-professional codes in effect in other states and then prepared a proposed code for Missouri.

This code is now under consideration by the committee. The committee has not yet met with the like committee of the Missouri Bar.

E. A. Smolik, Chairman,
Victor B. Buhler,
John R. Forgrave,
Robert E. Funsch,
James N. Haddock,
Sam J. Merenda,
Ray O. Muether.

The Speaker referred this report to the Reference Committee on Reports of Officers.

The report of the Committee on Mental Health, John J. O'Hearne, M.D., Kansas City, Chairman, follows:

REPORT OF THE COMMITTEE ON MENTAL HEALTH

The Committee on Mental Health met in Jefferson City, February 1, 1959, principally to consider legislation introduced in the current session of the Missouri Legislature. John J. O'Hearne, M.D., Kansas City; Robert J. Mueller, M.D., St. Louis; H. V. Guhleman, Jr., M.D, Jefferson City; James N. Haddock, M.D., Webster Groves; Arnold S. Block, M.D., St. Louis; Louis Belinson, M.D., Jefferson City, Assistant Director of the Division of Mental Health, and Mr. Tom R. O'Brien, St. Louis, attended the meeting.

BLUE CROSS

The Committee commended the St. Louis Blue Cross Plan on the institution of the new nervous and mental diseases rider now being offered to groups. The rider enables groups to extend their hospitalization benefits for nervous and mental illnesses, as well as for pulmonary tuberculosis and venereal, drug and alcoholic diseases, to conform with the benefits provided for other illnesses.

The Committee believes this new St. Louis Blue Cross rider is an excellent step in the right direction. It must continue to urge, however, that efforts be made to extend such coverage to all groups as a regular benefit rather than on a rider basis.

Specific information was not available at the time of the Committee's meeting as to the progress that the Kansas City Blue Cross Plan may be making toward providing hospitalization benefits for psychiatric care on the same basis as for other patients. Such information is being requested by the Committee.

A.M.A. MEETING

The chairman reported to the Committee on the fifth annual conference of mental health representatives of state medical associations held by the American Medical Association in Chicago, November 21-22, 1958. The conference provides the opportunity for discussion of common problems affecting mental health and for the exchange of ideas and experience in seeking the solution to these problems.

LEGISLATION

The Committee considered a number of bills dealing with mental health which have been introduced in the Missouri legislature thus far this season.

House Bill No. 47 provides for Missouri's participation in the Interstate Compact for Mental Health, a reciprocal arrangement for the care of mentally ill patients. Under the Compact, a person from a participating state becoming in need of institutional care in another participating state is eligible for care in that state, regardless of residence requirements. The Committee approved this bill and recommends its support by the Association.

Senate Bill No. 18 permits transfer of patients from state mental hospitals to rest or boarding homes. The purpose of the bill is to allow senile patients to be cared for in boarding homes, thus freeing beds in state mental hospitals for care of the mentally ill. A similar bill in the last session of the legislature was approved in theory by the Committee, and the present bill was also approved.

Senate Bill No. 49 provides that the old state Trachoma Hospital at Rolla be converted to the care of cerebral palsy patients. It was the consensus of the Committee that such a step would entail a number of complications, and it was the feeling of the members that further study should be given to the situation before such action is taken.

The moves of psychologists to obtain a state certification system were discussed by the Committee. Together with the Committee on Relations with Psychology of the American Psychiatric Association, the Committee emphasizes that:

1. Psychotherapy is a form of medical treatment and does not form the basis of a separate profession. The psychologic and physical components of an illness cannot be separated in diagnosis and treatment.
2. It is imperative that all psychologists dealing with persons suffering from mental and nervous diseases and disorders should do so only under supervision by psychiatrists and in a medical setting offering adequate safeguards to the patient.

The Committee desires to reverse its former decision to endorse certification of psychologists and to recommend instead opposition of any efforts by the psychologists to obtain a system of state certification or licensure because of the danger that such a system inherently would promote private unsupervised practice of psychotherapy.

Senate Bills No. 136 and 137 which would separate the Division of Mental Health from the Department of Public Health and Welfare were approved by the Committee, with the proviso that the Committee felt that the entire administrative organization of the Division of Mental Health, the Department of Public Health and Welfare, and their interrelationships should be studied. The Committee, in fact, provided Dr. Duval, the new Director of the Division of Mental Health, also desires it, favors the appointment of a special interim committee of the legislature to study the entire subject of state laws regarding mental health with the purpose of reporting their recommendations to the Missouri Constitutional Convention in 1961.

John J. O'Hearne, Chairman,
Robert J. Mueller,
H. V. Guhleman, Jr.,
James N. Haddock,
D. R. Edwards,
A. L. Brown,
Arnold S. Block,
Albert Preston, Jr.,
John H. Platz.

The Speaker referred this report to the Reference Committee on Medical Education and Public Welfare.

The report of the Committee on Hospital and Professional Relations, Hollis N. Allen, M.D., St. Louis, Chairman, follows:

REPORT OF THE COMMITTEE ON HOSPITAL AND PROFESSIONAL RELATIONS

Members of this Committee have served as members of the Missouri Conference for Improvement of Care of the Patient. The Missouri Conference is made up of an equal number of representatives from the Missouri Hospital Association, the Missouri Nursing Association, and the Missouri State Medical Association.

The Missouri Conference met on two occasions during 1958, and again in February, 1959. Among projects discussed were:

1. "Community Program for Older Persons in Greene County, Missouri." (This program, primarily in the discussion stage, includes representatives of the medical profession, nursing homes, rehabilitation services, social welfare agencies, Community Chest and Greene County Health Departments.)
2. Jefferson County Multiphasic Screening Survey. (Reports relative to this program have been presented from time to time to the Council of MSMA and references to it will be found in the published reports of the Council.)
3. Public Health Nursing Program. (The MSMA advisory committee to the Division of Health also considered this program and recommended that the Director of the Division meet with County Medical Societies in order to explain to physicians wherein the public health nurses might be useful to the people and to the practicing physicians.)
4. Nursing Home Program. (Information relative to the licensing of nursing homes from time to time has been presented to the Conference. Legislation, classifying these homes into three categories, was adopted in 1957. Since that time 146 homes have been licensed by the state and between 400 and 500 others are attempting to comply with the law. About 250 were

forced to close because of inability to comply with the new law.)

5. White House Conference on Aging. (Information concerning a bill in the Missouri legislature providing for appointment of representatives to the White House Conference on Aging was presented, along with the suggestion that the parent bodies should recommend the type of organization and members of the Missouri delegation to the Governor if appointment of conferees remains under his jurisdiction.)

Staph Infection in Hospitals

The Conference discussed and considered a problem concerning hospital-acquired infections especially those due to staphylococcus, and made a report to the Council at its meeting September 27, 28, 1958. In general, the Conference recommended that Dr. Hardwicke get in touch with the Conference when an actual problem develops, at which time, each of the organizations might appoint a representative to work with the Division of Health.

Barnes Hospital received a large financial grant from the John A. Hartford Foundation of New York to study and investigate infections occurring in hospitals and in surgical wounds.

A panel on staphylococcus infections is to be held at the MSMA Annual Meeting in Kansas City.

Aging

The Committee was asked by the Council to handle problems of the aging in Missouri. In order to consider ideas on this subject the Committee met in Jefferson City on February 26, 1959.

Although the Committee was pleased to receive the Council's recommendation that it act as the official body of the Association in dealing with aging, it was brought out that because of its magnitude, this one problem might well envelope the other areas with which the Committee is concerned. Since the broad problems connected with the aging are already of great importance, and promise to continue to grow in extent and complexity, it is the Committee's recommendation that a permanent standing committee of the Association be set up to deal with this one subject alone.

Two members of the Committee have served on advisory committees to the Missouri Division of Health during the year. Dr. Stanley S. Peterson, member of the Committee and chairman of the Missouri Conference for the Improvement of the Care of the Patient, represented the Association at state-wide meetings held under the auspices of the Division of Health on the subject of the aging. Dr. Hollis N. Allen, chairman of the Committee, was appointed as a member of the advisory committee to consult with the Division of Health on Missouri's new nursing home law.

Hollis N. Allen, Chairman,
W. S. Sewell,
Stanley S. Peterson,
Carl F. Vohs,
Victor B. Buhler,
W. F. Francka.

The Speaker referred this report to the Reference Committee on Amendments to the Constitution and By-laws.

The printed report of the Council and the report of the Council meeting of February 20 and 21, J. H. Summers, M.D., Lebanon, Chairman, follow:

THE COUNCIL

Meeting of June 7, 8, 1958

The Council met at the Coronado Hotel, St. Louis, June 7, 8, 1958, with J. H. Summers, M.D., Lebanon, Chairman, presiding. Those present were: Drs. Summers, Leonard T. Furlow, St. Louis; B. M. Stuart, Boonville; C. G. Stauffacher, Sedalia; Kenneth C. Hollweg, Kansas City; W. W. Tillman, Springfield; Ben M. Bull, Ironton; W. F. Francka, Hannibal; Ralph Perry, Kansas City; R. O. Muether, St. Louis; Joseph C. Peden, St. Louis; Durward G. Hall, Springfield; Charles R. Doyle, St. Louis; Oscar P. Hampton, University City; Edmund Smolik, St. Louis; H. M. Hardwicke, Jefferson City; Messrs. John H. Noble, Kennett; Hollister Smith, Lemoine Skinner, Bill Logan, Ray McIntyre, Tom R. O'Brien, and Miss Helen Penn, St. Louis.

DR. BOHRER'S DEATH

Dr. Stuart and Mr. McIntyre reported attending the funeral of E. Royse Bohrer, M.D., former Secretary, in Jefferson City, on June 6.

MINUTES

Minutes of the Council meetings of April 13 and 16 were read as follows:

Sunday, April 13, 10:30 a.m.
Hotel Sheraton-Jefferson, St. Louis

Presiding: R. O. Muether, M.D., St. Louis, Chairman.

Present: Drs. Muether, Donald M. Dowell, Chillicothe; J. C. Creech, Troy; B. L. Murphy, Hannibal; B. M. Stuart, Boonville; C. G. Stauffacher, Sedalia; Ralph Perry, Kansas City; W. W. Tillman, Springfield; J. H. Summers, Lebanon; Ben M. Bull, Ironton; W. S. Sewell, Springfield; W. F. Francka, Hannibal; Joseph L. Fisher, St. Joseph; E. Royse Bohrer, Jefferson City; Durwood G. Hall, Springfield; Messrs. John W. Noble, Kennett; W. H. Bartleson, Kansas City; Lemoine Skinner, Ed Schneider, Bill Logan, Tom R. O'Brien, St. Louis.

ALCOHOLISM COMMITTEE

The report of the Committee on Alcoholism was presented for the information of the Council.

GROUP INSURANCE

Mr. Logan gave the following report on group insurance.

The Council has received many requests from insurance companies to be allowed to submit proposals for group insurance coverage for the physicians belonging to the MSMA. In addition, the Council has received a few inquiries from MSMA members concerning the possiblities of such coverage. As of now, health and accident coverage are the only two protections offered under the auspices of the MSMA. The subject evidently is of national interest because the AMA is surveying state associations as to whether it should sponsor a group life insurance program. Therefore, realizing that some medical societies in Missouri already have arrangements of some type or another with insurance firms, the Council poses this question to the House of Delegates: Does the House believe the subject of expanding our group insurance coverage should be studied by the MSMA?

After discussion, on motion of Dr. Tillman, seconded by Dr. Stuart, it was decided to await a report from the AMA on its findings.

WORKMEN'S COMPENSATION

The report of the special committee to study Workmen's Compensation was presented to the Council for its information and approval for submission to the House, which was given.

HOUSE AGENDA

Various subjects to come before the House of Delegates were discussed and it was stressed that Councilors would be present at Reference Committee meetings.

Wednesday, April 16, 1958

Hotel Sheraton-Jefferson, St. Louis

Presiding: W. F. Francka, M.D., Hannibal, President, called the meeting to order and asked for nominations for Chairman of the Council.

Those present at the meeting were: Drs. Francka, Perry, Dowell, Murphy, Creech, Stuart, Stauffacher, Hollweg, Tillman, Summers, Bull, officers and members of the Council; and Drs. Neilson, Hampton, Muether, Gunn, Benjamin, Sewell, Fisher, Mr. Noble, Mr. Skinner, and Mr. O'Brien.

The Council met during the year.

PROXY REQUEST

Arthur W. Neilson, M.D., St. Louis, asked to serve as proxy for Dr. Furlow and was asked to wait until there was an organized Council.

OFFICERS ELECTED

Officers elected by nomination, second and vote, are as follow: Chairman of the Council, J. H. Summers, M.D., Lebanon; Vice Chairman, Donald M. Dowell, M.D., Chillicothe; Secretary, John I. Matthews, M.D., Jefferson City; Treasurer, R. O. Muether, M.D., St. Louis.

NEW COUNCILORS

Dr. Perry introduced Kenneth C. Hollweg, M.D., Kansas City, Councilor from the 7th District.

Dr. Neilson presented a request signed by all St. Louis delegates asking that he be allowed to serve in the place of Leonard T. Furlow, M.D., St. Louis, new 3rd District Councilor, who had to leave the meeting. This was denied since there is no provision for any one to serve in the place of a Councilor. Dr. Neilson stated that Dr. Furlow had wished to place the name of George Thoma, M.D., St. Louis, in nomination for Treasurer.

CONFERENCE ON AGE

Mr. O'Brien presented a letter from the AMA asking that a representative or representatives be sent to a five state conference in Omaha on May 25 on problems of the aged. On motion of Dr. Tillman, seconded by Dr. Perry, the chairman was asked to have some one represent Missouri at the conference.

WEST PLAINS HOSPITAL

The situation at the West Plains Hospital, given in a letter from Dr. Callahan to Dr. Sewell, was discussed. On motion of Dr. Tillman, it was decided to refer the matter to the Committee on Hospitals and Professional Relations.

CIVIL DEFENSE

The meeting planned for late April at which a 200-bed emergency hospital would be displayed was discussed. It was felt that this could not be done within the $150 set aside by the Council, that the Armory at Jefferson City would not be ready by that time and that further information from the AMA level was needed. On motion of Dr. Tillman, it was voted to suggest that no attempt be made to hold such a meeting until further information was received from the AMA.

AMA DELEGATES

A meeting of the committee of the Council with the AMA Delegates was reported. The need for funds for hospitality by the Delegates and the possibility of paying expenses of alternates were discussed. It was decided that up to $1,500 be made available for Delegates at AMA Sessions and that the question of paying expenses of alternates be referred to the Budget Committee.

BANK RESOLUTION

A resolution to be presented to the Bank to show signatures of the new officers to be used was adopted.

NEXT MEETING

It was decided that the next meeting of the Council would be held June 7 and 8 in St. Louis.

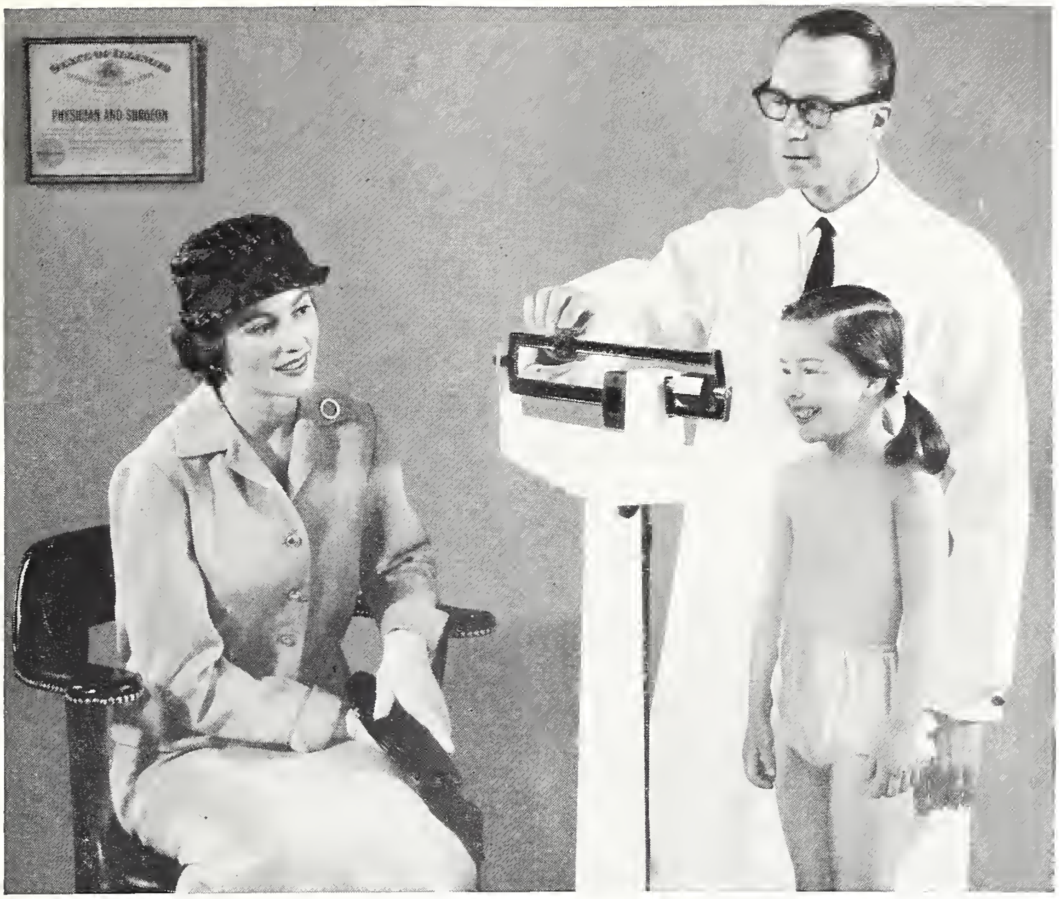
On motion these minutes were approved.

June 7, 8 Meeting Resumed

JUNIOR MEMBERSHIP

The change in the by-laws referring to junior members, adopted by the House of Delegates, MSMA, April, 1958, was read as follows:

"Junior members shall be limited to those members of component societies (1) who are serving a full-time internship or residency in a hospital approved by the Council on Medical Education of the AMA (2) and they shall continue as junior members for the



Underweight Children Gain and Retain Weight with Nilevar®

One of the most convincing evidences of the anabolic activity of Nilevar, brand of norethandrolone, has been its ability to improve appetite and increase weight in poorly nourished, underweight children.

A highly important feature of the weight gain thus produced is that it is not ordinarily manifested by deposition of fat but as muscle tissue resulting from the protein anabolism induced by Nilevar.

Anorexia and "Weight Lag" Study—Brown, Libo and Nussbaum have reported* consistent and definite increases in rate of weight gain in eighty-six patients, ranging in age from 7 weeks to 15½ years. This beneficial action of Nilevar was observed in the patients with organic and traumatic disorders as well as those whose only complaints were poor appetite and/or persistent failure to gain weight.

In this study, the weight gained was not lost after discontinuance of Nilevar therapy although many patients did not continue the sharp gains effected by the drug.

The authors are of the opinion that Nilevar is a highly useful anabolic agent for influencing weight gain in underweight children.

When Nilevar is administered to children a dose of 0.25 mg. per pound of body weight is recommended and continuous dosage for more than three months is not recommended.

Nilevar is supplied as tablets of 10 mg., drops of 0.25 mg. per drop and ampuls of 25 mg. in 1 cc. of sesame oil. Further dosage information in Searle Reference Manual No. 4.

G. D. Searle & Co., Chicago 80, Illinois. Research in the Service of Medicine.

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*Brown, S. S.; Libo, H. W., and Nussbaum, A. H.: Norethandrolone in the Successful Management of Anorexia and "Weight Lag" in Children, Scientific Exhibit presented at the Annual Meeting of the American Academy of Pediatrics, Chicago, Oct. 20-23, 1958.

first three years subsequent to the completion of any accredited service."

On motion of Dr. Muether, seconded by Dr. Francka, it was agreed that this should become effective on July 1, 1958.

TREASURER'S REPORT

Dr. Muether reported on the finances of the Association and his report was accepted.

Dr. Muether moved that $30,000 be changed into the bond account of the Association and on second this was passed.

FIELD SECRETARY'S REPORT

Mr. McIntyre reported on meetings that have been attended since May 1 and announced several meetings that will be held in the near future.

He presented a list of physicians who have located in Missouri towns of less than 12,000 since July 1, 1957, approximately 50 in number. He presented a new schedule that will be used in the preceptorship program of the University of Missouri. The periods to be used for this program are: January 19 to March 1, 1959; March 2 to April 14, 1959, and April 15 to May 27, 1959. He also presented a list of the preceptorship assignments of fourth year medical students of the University during 1957 and 1958.

Material on the Hill-Burton appropriations available from July 1, 1957 through June 30, 1958, was presented as follows:

Department of Health, Education and Welfare
($849,395,800)

Division of Hospital Facilities ....Total $122,650,000

This division administers the federal aspects of both the original and expanded Hill-Burton programs. Total appropriations are divided into the following four categories:

Hill-Burton Original Program $99,000,000

This appropriation, allotted to the states on the basis of population and per capita income, assists in the financing of new hospitals and related health facilities construction under the original Hill-Burton program. To date federal funds have partially financed approximately 3,170 projects, including 145,400 hospital beds, 695 public health centers, 21 state health laboratories and something in excess of 100 nurses' homes and training facilities. Since 1946, the inception of the program, federal contributions represent $852,000-000; when the sponsors' share is included, the total is $2,687,000,000.

Medical Facilities—Category Program $21,000,000

The total allotted to the states this year on a population-per capita-income formula will assist in the financing of new construction under the 1954 amendments in four categories as follows: $6,500,000 for hospitals for the chronically ill and impaired; $6,500,000 for diagnostic centers, or diagnostic and treatment centers; $4,000,000 for nursing homes; and $4,000,000 for rehabilitation facilities. As under the original program, the federal share may range from one-third to two-thirds of the total project cost. As of July, 1957, a total of 344 projects had been approved divided among the four categories as follows: facilities for chronically ill (71), diagnostic-treatment centers (131), nursing homes (80), and rehabilitation facilities (62).

Hill-Burton Administrative Expenses $1,450,000

This appropriation is used for administration, including salaries and expenses for the hospital survey and construction program for the federal headquarters and for eight regional federal offices.

Research $1,200,000

Authorized in 1949 but not appropriated until 1955 is this item for research, experiments and demonstrations on utilization of hospital services, facilities and resources. The bulk of the money is assigned as grants to states, universities, hospitals, hospital associations and a small amount for direct research by the U. S. Public Health Service.

Federal (Hill-Burton) hospital and medical facilities construction program from inception of program through December 31, 1957, in Missouri was presented in tabular form, showing a total cost of all projects of $62,214,000; total hospital beds added 3,224; total chronic hospital beds added 100.

Mr. McIntyre reported that hospitals either planning or in process of enlarging are the Phelps County Hospital, the Kelling Clinic and Hospital at Waverly, the West Plains Hospital, Texas County Hospital at Houston, the Levering Hospital at Hannibal, Memorial Hospital at Brookfield, a hospital at Sweet Springs, Bothwell Hospital at Sedalia, the Boone County Hospital at Columbia and hospitals at St. Charles, St. Joseph, Joplin and Springfield considering additions.

He presented several booklets dealing with physician placement and with community and physician assistance in locations.

OFFICE EQUIPMENT

It was reported that a new mimeograph was needed in the office and that the budget would not cover this. On motion of Dr. Muether, it was voted the budget be increased by $500.

FORAND BILL

Dr. Peden and Mr. Logan reported on the rather extensive work that has been done in Missouri in opposition to the Forand Bill, H.R. No. 9467. The steps that have been taken were given in chronological order with many clippings shown. It was stated that hearings on the bill will start June 16 and that the Association had been asked to prepare a statement which could be presented in Congress. The following proposed statement was presented and accepted with the suggestion that the House of Delegates action in regard to the Vendor program be added.

Statement of MSMA's Position to House Ways and Means Committee Re: Forand Bill
(H.R. 9467)

Missouri physicians wish to state their opposition to H.R. 9467 and other similar measures seeking to provide free hospital and surgical care for Social Security recipients.

Physicians, as always, still stand ready to provide free medical care for those individuals who need help. This system still seems more in keeping with the American way of life than H.R. 9467.

Missouri doctors recently proved this is no hollow statement. They voted unanimously to decline payment for their services if the Vendor program to provide medical care for indigents is adopted in Missouri.

There are many factors that make H.R. 9467 unattractive to physicians, but the most important one is the threat it presents to the doctor-patient relationship. Once a governmental agency enters the picture this relationship suffers. All too soon, it is the government who is calling the shots. The patient and the doctor are the ones expected to conform.

The quality of medical care has suffered in every country that has tied up its medical profession and people with the red tape of bureaucratic controls. The United States now is the undisputed world leader in medical research and care. Why destroy this?

The Council received various reports during the year.

In Missouri, as in other states, progress is being made to bring more and better voluntary health protection to the older citizens. Just recently in Missouri all age restrictions were dropped by Blue Shield and Blue Cross plans.

The four major voluntary groups in the health field also recently formed a Joint Council to Improve the Health Care of the Aged. This is good because the problem cannot be solved by just legislation. It is a philosophical problem that requires a change in our nation's thinking.

Americans are living longer. Consequently our older citizens are making up a larger and larger percentage of our population.

This problem must be approached from a new angle. That is why the Joint Council was formed. Maybe our arbitrary retirement age of 65 will have to go. Some Congressmen say it should be 60, but logically and physiologically it probably should be raised, not lowered.

In other words, voting free hospitalization and surgical care for social security recipients will not solve the problem of the older citizen. What he needs is not more help, but a chance to do more for himself. Psychologically, it would be better to help him work longer and retain his sense of independence.

Economically, H.R. 9467 would place a tremendous burden on the working public. It would hike their taxes for social security more than 70 per cent. The combined payment of the worker and his boss would jump immediately from the present ceiling of $189 a year to $330, an increase of $141. By 1975, that combined payment would soar to a ceiling of $570 a year —nearly $50 a month.

That will just be a start, however, if H.R. 9467 becomes law. Where it would stop is anyone's guess. Each session of Congress would see numerous attempts to broaden social security coverages even more. Before too long, tax deductions would be bigger than the worker's take home pay. The businessman, of course, would have to pass his added costs on to the buying public.

All of this can occur just because the nation does not face up to the real problem that people are living longer and our philosophy needs changing. Let's take time to re-evaluate the problem of the older citizen, not just pass stop-gap legislation.

RESOLUTIONS TO BE PRESENTED TO AMA

The following resolution passed by the House of Delegates was read:

WHEREAS, This House of Delegates of the American Medical Association has had under consideration for a period of time a study of the relationship existing between Doctors of Medicine and Doctors of Osteopathy, and

WHEREAS, There still remains an apparent need for guidance of the constituent associations by the American Medical Association, and

WHEREAS, This question of ethical relationships is currently a matter of consideration by several constituent state societies; therefore be it

Resolved, That this House of Delegates take immediate action to call for a re-examination of the Cline Committee Report of 1955 and such subsequent studies that might be pertinent to the question under consideration and cause to be formulated a policy which can be useful as a guide to the constituent medical associations in their appraisal and examination of the relevant issues between the two branches of the healing arts profession; and be it further

Resolved, That such policy be formulated with the least practical delay consistent with sound judgment in order that those constituent societies immediately faced with this question will have some firm postion from which to proceed.

This was discussed by Drs. Peden, Hall, Muether, Furlow and Mr. O'Brien. Upon motion of Dr. Furlow, it was voted to introduce the resolution.

The following resolution adopted by the House of Delegates regarding care of nonservice connected disabilities of veterans was read as follows:

WHEREAS, According to special report 85-3 of the Washington office of the AMA the federal government spent $619,614,000 on hospitalized medical care of veterans in VA Hospitals in 1957 of which about 75 per cent had non-service connected disabilities, and

WHEREAS, Ways and means of obtaining economy in federal government are allegedly being sought by Congress at this time; therefore, be it

Resolved, That this House of Delegates of AMA urge congressional action to restrict hospitalization of veterans at VA Hospitals to those with service connected disabilities; and be it further

Resolved, That the organized medical profession of the United States offer to provide the VA with competent attending and consultant staffs of a quality acceptable to Dean's Committees provided admissions to VA Hospitals are restricted to patients with service connected disabilities.

After discussion, on motion of Dr. Stuart, it was voted to present the resolution.

On both resolutions the delegates were instructed to use their considered judgment as to the best way to handle the resolutions.

LICENSURE BILL

Mr. O'Brien reviewed the proposed licensure act with the changes made by the House of Delegates and said that it had been given to the osteopathic association and that they would consider it at a meeting of their house in October. The Special Committee of the Council, composed of Drs. Muether, Tillman, Perry, Francka, Creech and Summers will continue this study and report at the next meeting of the Council.

AWARDS

It was announced that the scrolls and $100 bonds presented to the outstanding seniors in the three medical schools had been presented to Daniel Hilty, Deepwater, Mo., at the University of Missouri; to James L. Striebel, Pittsburgh, Pa., at St. Louis University, and to Jerome Fred Levy, St. Louis, at Washington University. It was stated that the Associated Press carried a release on these awards.

DIVISION OF HEALTH

A letter from Dr. Hardwicke stating that he would like an early meeting of the recently appointed advisory committee, composed of Drs. Stauffacher, Peterson, Matthews, Eversoll and Modlin, and outlining subjects to be discussed was presented. The subjects covered were laboratory work of the Division, development of rehabilitation programs within nursing homes, public health nurse program, health education program, immunization program, clinics, development of local health units, birth and death certificates, Hill-Burton program, public health programs in general. Dr. Hardwicke discussed these phases and answered questions.

Action on the question of the Division of Health discontinuing doing diagnostic laboratory tests was delayed pending a report from the Committee on Laboratory Medicine.

REPORT OF MEDICO-LEGAL COMMITTEE

Reports of meetings of the special Medico-Legal Committee on March 18 and May 15 were presented as follows:

March 18, 1958

"*Purpose:* The meeting held at Dr. Smolik's home was to determine if the committee members present believed there was sufficient reason to meet with a like committee of the Missouri Bar Association to discuss mutual problems. The proposal for such a joint meeting came from the bar group.

"The March 18 meeting was the second held on the subject, the first being March 2, 1958, at the Coronado Hotel. Drs. Smolik, Merenda, Haddock and Funsch were present at both meetings.

"*Decision:* It was the consensus of opinion of those present that there were plenty of areas that offered hope of profitable discussion between the two professions.

"It was pointed out there already were numerous codes between physicians and lawyers in other states. There also have been various attempts to draw up such agreements in Missouri, with one going on now in the St. Louis area.

"*Areas of Possible Discussion:* The most obvious area involves personal damage suits because that is where most of the physician's time seems to go.

"It was mentioned that the trouble in the personal injury field often starts when the attorney-client relationship is imposed on the physician-patient relationship.

"Not only does that irritate many doctors, but many feel that such courtroom-connected duties are an imposition on their time. It was felt that this is one place where a possible code of conduct, or standard of practice, might help spell out the responsibilities on both sides. It was fully understood by those present that however one might draw up a code there always would be dissenters in both professions. There always will be lawyers who will force the physician into court by subpoena, rather than prior arrangements. There always will be physicians eager to testify for the proper fee.

"The committee members mentioned briefly another area of possible future cooperation—the problem of legislation, both at the state and national level. It was recognized that the two professions are two of the last outposts in the field of free enterprise. In most cases, the individual lawyer and physician is his own boss.

Many problems came before the Council.

"*Recommendations:* Dr. Funsch was requested to investigate the proposed Interprofessional Code of Ethics being discussed by the St. Louis Medical Society and St. Louis Bar Association. It is known to deal primarily with relations between the two professions on personal damage suits.

"It covers courtroom procedure, the making of medical reports and the payment of adequate compensation for doctors' services.

"The latter point—payment for services—seems to be one of the chief complaints of most physicians. It seems that frequently the patient and his attorney are all too eager for the doctor's help in preparing the case, but tend to forget him once the decision has been rendered.

"Dr. Haddock pointed out the problem was not confined solely to personal damage suits because he had encountered it frequently in guardianship cases in the probate court. He proposed the following points as worthy of discussion:

"Confidentiality of physician-patient relationship to be maintained. Lawyer to furnish written permission of patient before information is released.

"Fees submitted by physicians for report or medical testimony to be commensurate with fees charged for comparable amounts of time and skill in other situations.

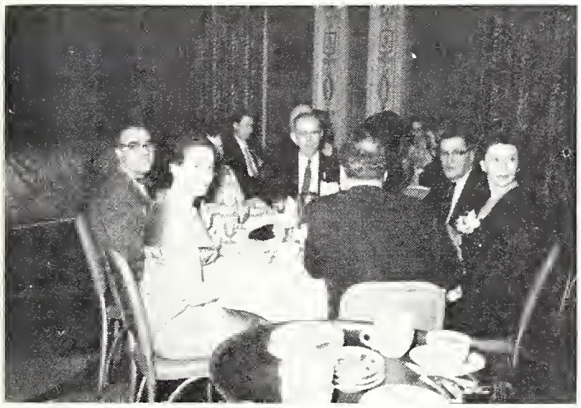
"When physician is asked to testify in non compos mentis cases, the attorney representing such cases to be expected to represent (without fee) the physician in his efforts to collect his fee from the court.

"Lawyers to represent without fee the physician in his efforts to collect payments for service in non compos mentis cases in which court must authorize payments.

"The need of adequate facilities in courtrooms for proper presentation of medical testimony was discussed by Dr. Merenda as a problem. He mentioned as one example, viewing boxes for x-rays.

"Another feature discussed for possible inclusion in a code was a grievance committee. As Dr. Funsch advocated, maybe there should be two. One composed of doctors, to hear complaints brought against physicians, the second composed of lawyers to hear complaints filed against them.

"*Future Action:* The committee members planned to review other codes before the next meeting. Of the 30-odd on hand, they generally followed the same language and covered the same points. They vary in length from the Cincinnati Code of two pages to Arizona's 14-page code. Practically all of them say: 'Doctor to furnish written reports promptly. Doctor is to be paid by the patient. Doctor is to render bill for courtroom time. Lawyer is to attempt to protect the doctor's claim for his services. No contingent fee for doctor. Give type of explanation about the reasons and need for subpoenas, value of the physician's time and proper courtroom procedure between the two professions.'


Dr. Perry attended the Woman's Auxiliary dinner.

"Other points covered by some codes that might be considered for Missouri: 'Clarification of "privileged communications" in doctor-patient relationship. Should a lawyer be allowed to pay a doctor's fee? If so, under what circumstances? Joint screening panel to consider possible malpractice cases. Some system of supplying names of expert medical testimony. Spell out how much the physician should cooperate with the opposition's attorneys.' "

May 15, 1958

Report of Special Medico-Legal Committee.

"*Purpose:* This report summarizes the results of the May 15 meeting of the Mid-Missouri County Medical Society in Rolla. The meeting was devoted to discussion of the mutual problems facing physicians and lawyers. Mr. Ed Gragg, of the Missouri Bar Association, also appeared on the program. About 60 persons were present. The crowd was rather evenly divided between physicians and lawyers and their respective wives from a 6-county area.

"*Results of Lawyer's Talk:* Mr. Gragg devoted most of his talk to what he felt was the practical side of the need for cooperation. In other words, it involved the dollar-and-cents approach to the situation, as he saw it.

"He stressed it was the obligation of the lawyers to see that their clients (our patients) paid their court-connected bills to us. Especially those charges arising from reports and time spent with their lawyers and in actual court appearances. At one point he suggested that if the doctors and lawyers had an inter-professional code, the lawyers could better insure that the doctors were paid for their services. He inferred such an agreement could be drawn to allow lawyers to withhold settlement money to pay physicians.

"Most of his presentation concentrated on the personal injury suit field. However, he did mention that malpractice suits are no factor in Missouri. He explained that few lawyers would take them, adding that most physicians also will not testify against other physicians.

"Other suggestions made by Mr. Gragg included faster reporting and more cooperation with lawyers; the use of simpler terminology by doctors when in court; complete impartiality of doctors in court; and doctors to be treated as gentlemen and not to be badgered by lawyers. He also said lawyers would be expected to keep doctors better informed of the progress and ultimate outcome of the case.

"One of the innovations, suggested by Mr. Gragg, would be statements to be signed by patient-clients acknowledging their obligations to pay the physician for his services.

"He emphasized that there was little likelihood of the physician ever being paid if the case was lost. Lawyers, of course, take their cases on a contingency basis, he pointed out. According to Mr. Gragg, they are not permitted to finance a litigation.

"*Physician's Side:* Dr. Smolik covered the philosophical similarity between the two professions. He mentioned they are two of the last outposts of individual enterprise left in our society. He also reviewed the economic and sociological problems facing the medical profession and how a code might help solve some of the problems.

"*Conclusion:* It was agreed between the two chairmen that their committees would get together in the not too distant future. Before that meeting, however, Dr. Smolik hopes to have another meeting of his committee."

These reports were discussed by Dr. Smolik, together with reporting a meeting at Rolla where he and an attorney appeared on the program at a joint meeting of lawyers and physicians. Following discussion, on motion of Dr. Tillman, the Committee was congratulated on its work and asked to continue at a somewhat cautious pace as it has been doing. It was felt this was better than complying with a request of the Missouri Bar Association that the presidents of the two organizations get together.

PUBLICATION COMMITTEE

Dr. Doyle reported on Missouri Medicine and asked cooperation of Councilors in continuing to obtain scientific material. He explained the need of additional personnel for the Publication Committee he would like the Council to appoint. On motion of Dr. Furlow, Dr. Doyle was empowered to select such additional members as he needed.

MEDICARE

Reports of the Committee on Medical Economics meetings of February 16 and May 25 were presented as follows:

Meeting of the Committee on Medical Economics
Coronado Hotel—St. Louis
February 16, 1958

"*Purpose of Meeting:* The Committee on Medical Economics met February 16 at the Coronado Hotel, St. Louis, to consider the schedule of fees for the new 'Medicare' contract. The present contract expires September 30, 1958.

"The Committee was aware of the action taken by the House of Delegates at the 1957 annual session, as follows: 'That the House of Delegates authorize the Council to explore the possibility of renegotiating a new contract (for Medicare) on a no-fixed fee schedule basis.'

"Such negotiation, therefore, is the responsibility of the Council and not of the Committee.

"However, in referring the new Medicare Manual to the Committee, the Council realizes that it may not be possible to arrange the new contract on a no-fixed fee basis. If such is the case and since the MSMA, after direct poll of its members, has favored cooperating in the Medicare program, it was thought best to start considering fees for the new Medicare contract. This will save valuable time that otherwise might be lost in waiting for the final decision. Additional members of the Association were invited to assist the committee in preparing the fee schedule.

"*Action:* After a general discussion of the present Medicare contract, the committee agreed it should be used as the basis for a new fee schedule. It was generally agreed that most of the fees are fairly well accepted by most physicians.

"To accomplish this, it was decided that additional physicians will be invited to assist. Those present agreed to contact others in their own field, especially at meetings of thier various specialty groups. Other specialists still to be contacted include psychiatrists.

"Tentatively the Committee decided to continue with the relative value schedule (or unit system) used by the California Medical Association.

"One of the problems confronting the group involves the proportioning of fees when one physician does not provide total care after the operation, such as postoperative care in the hospital and postoperative care following hospitalization. This problem was raised by the Federal government's office for Dependents' Medical Care. The new contract requires a percentage breakdown.

"Explanation of the percentage breakdown required is contained in a letter from the Office of the Surgeon General, Department of the Army, dated February 3, 1958. It explains:

"Column 1 covers cases in which the total surgical care, including pre and postoperative treatment, is provided by one physician.

"Column 2 is to cover surgery only. As stated in the Surgeon General's letter: 'In other words, the operating surgeon accomplishes preoperative examination and/or consultation and performs the surgical procedure, but does not render any postoperative care, either in or out of the hospital.'

"Column 3 covers postoperative care rendered in the hospital by other than the operating surgeon. The totals of Column 2 and 3 cannot exceed 90 per cent of the amount of Column 1.

"Column 4 covers just postoperative visits occurring after the period of postoperative care in the hospital. Again this is care *not* rendered by the operating surgeon.

"*Future Action:* All recommendations are to be considered at a future meeting of the Committee. Following this the Committee's findings will be made to the Council.

"May 1 has been set as the target date for recommendations from the Committee members, both regular and special. Please send them to the MSMA office so they can be consolidated for the next meeting.

Meeting of the Committee on Medical Economics
Coronado Hotel—St. Louis
May 25, 1958

"*Purpose of Meeting:* The Committee met to review possible changes of the Medicare contract that is to be renegotiated. First meeting of the Committee and its special members for this purpose was February 16, 1958. The present contract expires September 30, 1958.

"Since the last meeting, the House of Delegates authorized the Council of the MSMA to renegotiate another contract with the Defense Department on the same general lines as the present one.

The Special Committee on redistricting held several meetings.

"*Action:* Physicians present reported that on the whole their particular specialties were agreeable to the present Medicare fees. Certain changes, of course, will be sought by the negotiating team. These proposed changes, representing both increases and decreases, should help remove some of the present inequities.

"It was decided that the same fee schedule should apply for the Veterans Hometown program. This government program for veterans with service-connected disabilities is to be handled in a very simple fashion without formal negotiations over fees. Instead, the government plans to issue a letter of authorization for medical care by private physicians. The authorization will have no fixed termination date, but run indefinitely subject to changes by the government.

"It also was decided the Medicare schedule should be used when applicable for Railroad Retirement Board work. Although the MSMA has not been consulted regarding the fee schedule of the Missouri Rehabilitation Service, it also was felt the Medicare schedule should apply for medical care rendered under that program. As committee chairman, Dr. Rowlette recommends the percentage breakdown on surgical fees requested by the Defense Department not be done. Instead, he suggests each case in which such a procedure is necessary be handled individually and decided on its own merits."

On motion of Dr. Muether the recommendations on Medicare, the Veterans Hometown care and vocational rehabilitation given in the reports were approved.

It was announced that the time set for renegotiating of the Medicare contract was September 3 and 4. It was pointed out that 40 per cent of cases related to obstetrics and on motion of Dr. Bull, it was voted that an obstetrician, a surgeon and an internist should go to Washington as well as Mr. O'Brien or Mr. Logan for the renegotiation, the government being asked to pay for four instead of two representatives because two fiscal agents and plans are involved, but that four should go regardless.

COMMITTEE TO STUDY COUNCILOR DISTRICTS

Dr. Francka announced the committee approved by the House of Delegates to study the Councilor District set-up and delegate representation as follows: the member from the 1st District to be announced later; 2nd District, H. L. Greene, Hannibal; 3rd District, Daniel L. Sexton, St. Louis; 4th District, Guy N. Magness, University City; 5th District, Logan Allee, Eldon; 6th District, O. B. Barger, Harrisonville; 7th District, Victor B. Buhler, Kansas City; 8th District, Walter S. Sewell, Springfield, Chairman; 9th District, H. W. Carrington, Lebanon; 10th District, J. H. Trolinger, Jackson.

DIABETES ASSOCIATION

A letter from Dr. Henry E. Oppenheimer requesting the appointment of a member of the Association to the Council of the Missouri Diabetes Association was read and on motion of Dr. Muether, Lucien W. Ide, M.D., St. Joseph, was appointed.

NEWSLETTER

The possibility of a newsletter concerning Council proceedings was discussed. On motion of Dr. Francka, it was voted to consider a narrative account of the Council in MISSOURI MEDICINE at the same time the minutes were published for the time being and the newsletter be considered at a later meeting.

Meeting of September 27, 28, 1958

The Council met at the Coronado Hotel, St. Louis, on September 27, 28, 1958, with J. H. Summers, M.D., Lebanon, Chairman, presiding. Those present were Drs. Summers; Donald M. Dowell, Chillicothe; B. L. Murphy, Hannibal; Leonard T. Furlow, St. Louis; Joseph C. Creech, Troy; Byron M. Stuart, Boonville; C. G. Stauffacher, Sedalia; Kenneth C. Hollweg, Kansas City; W. W. Tillman, Springfield; Ben M. Bull, Ironton; W. F. Francka, Hannibal; Ralph Perry, Kansas City; John I. Matthews, Jefferson City; R. O. Muether, St. Louis; Rolla B. Wray, Nevada; Victor B. Buhler, Kansas City; Joseph B. Kendis, St. Louis; Ralph E. Duncan, Kansas City; H. E. Petersen, St. Joseph; H. M. Hardwicke, Jefferson City; Hollis Allen, St. Louis; James P. Murphy, St. Louis; Joseph C. Peden, St. Louis; Messrs. John W. Noble, Kennett; Hollister Smith, Lemoine Skinner, Ed Schneider, Bill Logan, Ray McIntyre, Tom O'Brien, and Helen Penn, St. Louis. At noon on Sunday the Council of the St. Louis Medical Society were hosts to the Council at a reception preceding lunch and Drs. Arthur W. Neilson, Robert B. Bassett, Walter Baumgarten, David N. Kerr, Myron W. Davis, Robert W. Kelley, John P. Eberle, Charles S. Sherwin and George E. Thoma, St. Louis, were present.

BOYS' CLUB

A letter from the Boys' Club of St. Louis was read thanking the Association for the old mimeograph which was given them rather than the Association taking the $10 trade-in offered on a new mimeograph.

NATIONAL SOCIETY OF MEDICAL RESEARCH

A letter from the National Society of Medical Research requesting a donation of $50.00, which the Association has customarily given, was read and on motion of Dr. Muether, it was voted to make this donation.

AMERICAN DIABETES ASSOCIATION

It was announced that the American Diabetes Association had appointed Dr. Henry E. Oppenheimer, St. Louis, as governor of Missouri for a three-year term.

SOCIAL SECURITY

It was announced that the Cole County Medical Society had passed a resolution favoring Social Security for physicians, this being the third county to pass such a resolution.

BUDGET COMMITTEE

The Chairman appointed the following Budget Committee: Dr. Muether, Chairman; Dr. Francka, Dr. Perry, Dr. Matthews, Dr. Bull, Dr. Stuart, and Dr. Summers, ex-officio.

TREASURER'S REPORT

Dr. Muether reported on the finances of the Association and on motion of Dr. Dowell the report was accepted.

On motion of Dr. Tillman it was voted to authorize the Mercantile Trust Company to invest up to 10 per cent of funds in bonds other than government bonds.

Investment of funds of the Association was discussed and it was decided to ask the Mercantile Trust Company to discuss investments with the Council at the next meeting.

COMMITTEE ON ALCOHOLISM

Dr. Duncan presented a book "Alcoholism in Missouri: A Statement of the Problem and Recommendations" prepared by the Committee on Alcoholism to the Councilors. He recommended that the problem be presented to the Governor and General Assembly as called for in the annual report of the committee. The annual report stated in part:

"1. The State of Missouri should recognize the existence and magnitude of the problem of alcoholism, which directly or indirectly afflicts so many of its citizens and their families. There should be established a state supported program for the treatment and rehabilitation of alcoholics which will search into the causes and prevention of alcoholism, and will educate the public thereon.

"2. The program should be administered within the Department of Public Health, in a separate bureau or unit having certain autonomy, its own budget and sufficient staff. There should be established an appropriate advisory board or commission to guide, advise and assist in the development of the plan.

A CPC was part of the scientific program.

"3. The initial project should be supported out of the general revenues in an amount estimated necessary to start and develop the program."

Ways to implement the recommendations of the annual report were discussed. On motion of Dr. Tillman the book on alcoholism prepared by the committee was accepted and $100.00 was allocated to carry out the recomendations on the annual report.

JEFFERSON COUNTY SURVEY

Mr. McIntyre discussed the pilot screening survey being conducted in Jefferson County. He presented printed materials used in the survey and results of the survey. He pointed out that it was limited to persons more than 40 years of age, that it was conducted at the Jefferson County Health Center at Hillsboro, that local volunteer help was used while tests were made by professional personnel under the direction of the Division of Health, and that 3,800 persons had been screened. He said that the reactions of physicians in the county to the survey were mixed.

He reported on the Public Relations Conference of the American Medical Association, pointing out the principal parts of the program. Hon. Thomas B. Curtis, Congressman, St. Louis County, was a member of a panel discussion at the meeting. He reported that members of the Greene County Medical Society furnished the entertainment at a reception during the meeting, "Medical Hit Parade of 1958"; the program was well received and the troubadors received invitations from many state associations for future dates.

He reported on the fall board meeting of the Woman's Auxiliary and asked for more cooperation between the Association and the Auxiliary. He called attention to two community meetings honoring physicians for 50 years in practice, one for Dr. P. W. Jennings at Canton and one for Dr. J. H. Holman at Unionville.

MEDICARE

Mr. O'Brien reported that the Medicare contract had been renegotiated in Washington on September 3 and 4. The Missouri negotiating team was composed of Drs. Rowlette, Mixson, Muether and T. R. O'Brien. He explained the curtailment in the program made necessary by the reduction of funds allocated by Congress. He said that several thousand items in the manual were considered and reviewed but that few changes had been made. He explained the various changes in the program as they were outlined in Medicare Supplementary Bulletin No. 6, mailed to all Missouri physicians September 26.

He said that 56 per cent of dependents in Missouri do not live with their sponsors. The following statistics on payments in Missouri were given:

Cost of Medicare Claims Processed
July 1, 1957 through June 30, 1958.

	No. of Claims	*Amount Paid*
Physicians	10,382	$ 808,604.54
Hospitals	6,966	785,046.40
Total	17,348	$1,593,650.94

AMA

Dr. Wray and Dr. Petersen reported briefly on the San Francisco session of the American Medical Association and called attention to the report which appeared in the August issue of MISSOURI MEDICINE. Dr. Wray presented the resolution introduced on the Veterans Administration by the Missouri delegation and the amended resolution adopted as follows:

RESOLUTION AS INTRODUCED BY MSMA

"WHEREAS, According to special report 85-3 of the Washington office of the AMA the federal government spent $619,614,000 on hospitalized medical care of veterans in VA Hospitals in 1957, of which about 75 per cent had non-service connected disabilities, and

"WHEREAS, Ways and means of obtaining economy in federal government are allegedly being sought by Congress at this time; therefore, be it

"*Resolved,* That this House of Delegates of AMA urge congressional action to restrict hospitalization of veterans at VA Hospitals to those with service connected disabilities; and be it further

"*Resolved,* That the organized medical profession of the United States offer to provide the VA with competent attending and consultant staffs of a quality acceptable to Dean's Committees provided admissions to VA Hospitals are restricted to patients with service connected disabilities."

The AMA Reference Committee on Legislation and Public Relations amended the last paragraph as follows:

"Resolved, That the American Medical Association suggest to the Dean's Committees that they restrict their activities to Veterans Administration hospitals admitting only patients with service-connected disabilities."

The amended resolution was adopted unanimously by the AMA House without debate.

VENDOR PROGRAM

Mr. O'Brien outlined the changes made by Congress recently in the Social Security laws. He pointed out that under terms of the present Missouri law a person on the aged welfare rolls in Missouri may get up to $60. This amount covers rent, food, clothing, etc., and medical care. Of that $60.00 the government pays $24.00 of the first $30.00 and $15.00 of the next $30.00, or $39.00, the state paying the balance of $21.00. The average payment in Missouri is $55.00 per month. If a person getting $40.00 a month needs medical care, the Department of Welfare may pay in monthly payments an amount up to $60.00, or $20.00 in this example, until the amount of the medical care is covered.

Fifty year physicians were honored at the banquet.

In those states that now have a vendor program, in addition to direct relief, the program pays directly to the vendor an amount set by the agency on the basis of a benefit schedule.

The new Federal program provides for participation by the Federal government in payments of $65 a month per old age recipient. Of this amount the Federal government still will pay $24 of the first $30, plus 53.42 per cent of the remaining $35.

This would make the Federal government's share of the $65 approximately $42.70, or nearly $4 more than under the present act. The state's share of the new $65 ceiling would be approximately $22.30, as compared with the present $21 share in the present $60 payment. The new program goes into effect October 1.

It is believed at present that the hospitals desire a vendor-type payment for any money provided for medical care under the new act. However, under the terms of the new act it still is possible to pay medical care money directly to the recipient. More information should be available on this at the time of the next Council meeting.

Mr. O'Brien has asked Mr. Proctor Carter, head of the State Welfare Division, if it might not be possible to issue a joint check for the medical care portion of a recipient's welfare payment. The check would be made payable to both recipient and the hospital, for example. This, in effect, would still preserve the traditional payment plan preferred by the medical profession; i.e., the patient pays for his own medical care, rather than the state paying the vendor directly. However, it is felt that Mr. Carter prefers a vendor program.

ANNUAL SESSION

It was announced that Dr. John Growdon, chairman of the program committee for the Annual Session, would make a full report at the next meeting of the Council, that the program was well toward completion and that the entire session would be held in the Muehlebach Hotel.

PROBLEMS OF AGING

Dr. Perry presented a report on the AMA meeting on Problems of Aging. The highlights of his report follow:

"Solving the problems of aging and the aged must begin with the individual and his community.

"To try to approach it from any other angle or level is to miss the problem entirely, I believe.

"We all realize that the medical profession basically is responsible for the problem. After all it is through our efforts that the life span has been steadily increasing. Now it looks as if we are going to have to be the leaders in making those increased years more meaningful.

"If we don't find the answers, answers will be imposed on us by the Federal government. Not that the lawmakers consciously want to dabble in our affairs, but because the pressures will be too tremendous for them to resist. I, of course, am referring to the Forand bill of the last session.

"This and other problems were discussed at the recent AMA Planning Conference on Medical Society Action in the Field of Aging in Chicago. Some 40 states were represented by 125 delegates.

"There were six basic points developed by the panelists on the 2-day program. They were:

"1. Stimulation of a realistic attitude toward aging by all people. In line with this, it was suggested for example we may need a new hiring system in which a man is hired for life and so on. We certainly need a new policy in the arbitrary retirement at 65 philosophy.

"2. Expansion of skilled personnel training programs and improvement of medical and related facilities for older people. Here it cannot be a cut-and-dried solution, such as a certain type of home designed specifically for the oldster. It has been found that the older person wants to choose his own home and normally wants to stay in his own community which, as I already have mentioned, is what he probably should do.

"3. Promotion of health maintenance programs and wider use of restorative and rehabilitative services. The importance of this can be seen, by how just a short immobilization in bed causes the muscles to lose their tone.

"4. Amplification of medical and socio-economic research in problems of the aging. The AMA asked that all material along these lines constantly be funneled to it.

"5. Cooperation in community programs for senior citizens. This, of course, follows the lines of endeavor being tried in our own Greene County-Springfield area in Missouri. In this plan (still in the formative stage) the entire community was first asked to decide what its most basic problem was and do something about it. Curiously enough the leaders in that area decided the health needs of the elder citizens was the most crying need. I am not certain how much or what type of progress has been made on solving those needs, but it does back up this point No. 5 rather well.

"6. Extension of effective methods of financing health care for the aged. Obviously, voluntary health insurance and prepayment plans can and should provide the basis for meeting large health care costs for most people, including the aged.

"Some of the ideas mentioned by Dr. E. B. Howard, Assistant Executive Vice-President of the AMA, pertaining specifically to the Blue Cross and Blue Shield Plans were:

"Show physicians why they should cooperate in reducing costs of the plans by reducing over-utilization.

"Reduce hospitalization costs by payment of health care for aged outside the hospital; i.e., in the home and doctor's office.

"Develop closer liaison between doctors and the Blue Plans.

"Develop total care plans for lower income groups.

"For commercial health insurance, Dr. Howard felt that a good major medical policy for both hospital and medical charges was good. The higher the deductible feature perhaps the better the policy.

"Physicians and medical societies were urged by him to discuss the ticklish subject of costs with hospital people.

"Another method of financing discussed by him was the post-payment or financing of medical and hospital expenses. It was felt that perhaps enough emphasis had not been placed on this procedure.

"The AMA is anxious that each state association have a committee to cope with this problem of the aging.

"Missouri does not have one specifically so designated. However, these problems are being handled through our Committee on Hospital and Professional Relations, headed by Dr. Hollis N. Allen. The other members are Drs. Walter Sewell, Stanley Peterson, Carl Vohs, Victor Buhler, and W. F. Francka.

"This committee, as you know, is charged with representing our Association on the Conference for Improvement of Patient Care.

"The other members of the Conference are the State Hospital Association and the State Nurses Association. Inasmuch as most of the problems of aging would have to be discussed with these two groups, this committee could be delegated the problem of aging. On the other hand, the Council might prefer to appoint a new committee."

After discussion of handling the problem at the state level, on motion of Dr. Francka it was decided to refer this to the Committee on Hospital and Professional Relations, with the privilege of adding members to the committee.

LEGISLATION

Dr. Peden reported on the final outcome of National legislation. A brief summary of his report follows:

"Three pieces of legislation occupied most of our legislative efforts during the 85th Congress. They were the Forand bill to provide free hospitalization for Social Security recipients, the Jenkins-Keogh bills and the Medicare program.

"The Forand bill was held off this year. But it will be back next year for sure. The Keogh bill to provide tax relief for self-employed professional people also was held up despite our best efforts. We received numerous letters from lawmakers concerning their interest in the bill, but the final death blow came from the Senate Finance Committee and the Treasury Department. Medicare already has been discussed.

"Most of our legislative contact was done through county society chairman or physicians who were known to be close to a particular legislator. On the whole it was a quiet-type campaign, designed to keep us out of the public eye.

"The way I see it, labor is trying, through vehicles such as the Forand bill, to extend its voting bloc to the retired persons many of whom came out of labor ranks. Now they number 13 million, and by 1960 they will be a million stronger. If labor leaders can be the champions of this group, think what it will add to their legislative power. Let's hope the Joint Council composed of the four major groups in the health field come up with some strong answers to combat Forand-type legislation. We should receive some help from the instructions of the House Ways and Means Committee to the Department of Health, Education and Welfare to conduct a study of medical care of the aged.

Reference committees discussed referred material.

"Also the Senator Kennedy subcommittee of the Senate Welfare Committee is starting a study of all problems of the aged.

"Another measure passed instructs President Eisenhower to call a White House Conference on Aging in January, 1961. At this national meeting, federal, state and local leaders will pool their information.

"A series of state-organized meetings will precede the conference. States are to be allowed from $5,000 to $15,000 apiece to finance their meetings. Incidentally, this measure had the full support of the AMA.

RESEARCH:

key to Kent's popularity

In 1958, Kent made the greatest gain in popularity ever recorded by any filter cigarette in any year—a sales increase of 20-billion cigarettes.

Behind this popularity is a story of months and years of research, perfecting the remarkable combination of filter action and flavor found in today's Kent cigarette. In developing Kent, Lorillard research scientists recognized that smokers wanted, on the one hand, a really satisfying taste; on the other, reduced tars and nicotine. In addition, smokers demanded a free and easy draw.

These, then, were the objectives. The first scientific breakthrough in the project was the development of the exclusive Micronite filter, patented by Lorillard. This filter was created because of newly-discovered principles in the field of filtration, which have been previously described in these pages.

Though this filter satisfied everyone on its ability to reduce tars and nicotine to the lowest level among the largest selling brands, there was still work to be done in the areas of taste and draw. After additional months of research, a new tobacco blend was developed which delivered rich taste *after* the smoke had passed through the filter. Next in the series of laboratory triumphs was a method of improving the draw to compare with the most free-drawing of all filter brands.

The rest of the Kent story is a legend in the tobacco industry. Outside, independent research studies confirmed the fact that Kent had achieved its objectives. Smokers responded. In fact, during the past year, more smokers changed to Kent than to any other cigarette in America.

KENT
TWENTY
KENT
CIGARETTES
NEW
EXCLUSIVE MICRONITE FILTER

A Product of P. Lorillard Company—First with the finest cigarettes—through Lorillard Research!

"Congress, of course, did boost social security payments somewhat. While it was just a 7 per cent increase, it followed a long established pattern of sweeting up the program in election years. The minimum hike was fixed at $3 a month, a recipient.

"To pay for the increase, social security taxes and taxable base also were pushed up slightly, effective January 1. The Budget Bureau reports that as of now receipts are not keeping up with payments. Last year's receipts are estimated at 8.35 billion dollars, with payments more than 1 billion more at 9.49 billion dollars.

"While we lost the Jenkins-Keogh bills, we got further with the idea of deferring tax on income invested in proper securities than we have before. The Keogh bill finally passed the House in a greatly amended form only to die in the Senate Finance Committee. Not only was Senator Byrd, committee chairman, against the measure, but the Treasury Department opposed it.

"The Treasury Department was against it for two reasons: Financially, it would have meant a tax loss of about 400 million dollars a year, tax officials said. Philosophically, the department maintained it was unfair to give tax relief to just one segment of our population. However, we know that people working for corporations already, in effect, get tax relief on money invested for their retirement by the firm. The Treasury spokesman suggested that whenever the entire income tax structure is overhauled, that would be the proper time to see about tax relief for the self-employed professionals."

Reference committees heard discussion by delegates.

Dr. Peden discussed the introduction and withdrawal of a resolution in the AMA House of Delegates asking for a review of the Cline report. He said that the resolution was withdrawn at the request of California because of a local problem there. After discussion, it was decided that advice should be obtained from the AMA on reintroduction of the resolution.

STAPHYLOCOCCAL INFECTIONS IN HOSPITALS

Dr. Allen reported on a Conference for the Improvement of Patient Care called at the request of Dr. Hardwicke, as follows:

"A problem concerning hospital-acquired infections, especially those due to staphylococcus, has been referred to the Conference for the Improvement of Patient Care by Dr. H. M. Hardwicke, Acting Director of the State Health Division. As a member of the Conference, I in turn, am referring it to the Council for its decision.

"As you all know, the Committee on Hospital and Professional Relations is charged with representing our state association on this Conference. The other members of the Conference are the State Hospital Association and the State Nurses Association.

"The problem is this: Dr. Hardwicke feels it would be beneficial if he had a committee he could call into action in the event of a major staph infection in the state. He feels such a committee, similar to the composition of the Conference, would be a big help in making the survey needed in such an outbreak.

"It was the thinking of the Conference that rather than name another special committee, we would wait until Dr. Hardwicke had an actual survey problem. At that time, each of our organizations could designate a representative or two to work with the Division of Health. It is my feeling that such a problem could perhaps best be handled within our association by the Committee on Laboratory Medicine. The committee member closest to the point of outbreak could then be requested to advise with Dr. Hardwicke concerning his survey."

On motion of Dr. Muether, the report was accepted.

SPECIAL COMMITTEE TO DIVISION OF HEALTH

Dr. Stauffacher made the following report for the Special Advisory Committee to the Division of Health:

"Problems presented by Dr. Hardwicke:

"1. Dr. Hardwicke was concerned over fulfilling requests of many doctors in private practice for services from the Division of Health, such as serologies. Dr. Hardwicke requested help from MSMA in handling this laboratory problem of determining just what functions the State Laboratory should serve.

"The results of this study are covered in the report of the Committee on Laboratory Medicine that follows this report.

"2. He discussed the present Nursing Home Law and problems being encountered in the expanding need for more and better homes. He feels that much more needs to be done to prevent the disabilities of the people seen in most of these homes. On the basis of present experience he feels that most doctors are too busy or unwilling, and unlikely to assume much responsibility for the rehabilitation of those in, or about to enter, these homes. To what extent should the Division of Health get into the solution of this problem?

"3. How can the Public Health Nurse be more helpful to the doctor in private practice? The question was asked of Dr. Hardwicke as to what the functions of a Public Health Nurse were? He also would like to see the local P. H. Nurse function in recruiting retired and married nurses in each community for limited nursing duty.

"4. In public health education, Dr. Hardwicke proposes that a selling job be done to promote the idea of every person having a family physician and following his counsel on health matters.

"5. He stated that the Division of Health is supplying vitamins to pre-natal free clinics, and biologicals and medications in numerous other situations. Among others this takes in school immunization programs.

What policy should be followed by the Division of Health in these matters?

"Recommendations of the Special Advisory Committee:

"1. See report of Committee on Laboratory Medicine.

"2. That education rather than legislation is needed in most of these public health matters, including the nursing home problem. It was suggested to Dr. Hardwicke that he make himself available to appear before County Medical Societies from time to time and discuss mutual problems. He agreed to do this.

"Therefore, the Committee recommends to the Council—that County Medical Societies be requested to invite Dr. Hardwicke, Acting Director of the Missouri Division of Health, to appear on society programs to discuss mutual problems.

"3. That county medical societies be advised that individual doctors in counties where Public Health Nurses are employed will be contacted by the nurses to explain how they may be helpful to the doctors.

"4. That the Committee agrees with Dr. Hardwicke's basic proposal of promoting a family physician for everyone and following the counsel of this physician in health matters. Further, that greater emphasis should be placed in public health education on the idea that only people who cannot afford to pay for their medical care should get it free.

"5. That the Division of Health and an appropriate committee of MSMA suggest a policy governing the distribution of biologicals, medications and vitamins by the Division of Health."

It was pointed out that the Division of Health might use Missouri Medicine for dissemination of information to physicians of the state. After discussion of referral of problems to standing committees, on motion of Dr. Muether it was voted to continue the Special Committee which could then use the facilities of standing committees for specific questions.

COMMITTEE ON LABORATORY MEDICINE

Dr. Buhler reported on the evaluation by the Committee on Laboratory Medicine of the laboratories of the Division of Health which was done at the request of Dr. Hardwicke. He said that the committee agreed with Dr. Hardwicke that some procedures should be discontinued including routine serological tests, but that premarital serological examinations should be continued because of legal requirements. Dr. Buhler said that pathologists in the state would take care of indigent cases. In discussion it was pointed out that the report of serological examination on birth certificates was not required by law but that premarital examination was.

On motion of Dr. Tillman, it was voted that the Division of Health should discontinue all serological work except that of premarital examination. It was agreed that this information should be widely disseminated to avoid confusing the public and physicians.

Dr. Buhler reported that the results of the cytology program were gratifying and that 25 per cent of physicians in the state had seen the film "Time and Two Women" and had seen demonstrations. He said that 47,000 examinations were made during the last year. He said that the second phase, that of educating the public, would begin in the near future.

A.M.E.F.

Dr. James P. Murphy presented the following report on the American Medical Education Foundation:

"This year the American Medical Education Foundation Committee of MSMA decided to try a personal solicitation campaign to raise money for our medical schools.

"Nearly 40 of our 55 component medical societies already have named solicitation chairman in response to a request from our committee. We are contacting these chairmen, asking them to appoint a committee to do the actual soliciting. We are suggesting a committeeman for each 5 or 10 members of their society.

"Incidentally, Missouri gave $9,226 last year to AMEF. While this was an increase over the $7,484 given the year before, the number of givers dropped from 230 to 223.

"Our campaign starts October 1 with a 1-page editorial in the *State Journal* on the medical schools' need. It will outline completely the program to be used this year in Missouri.

"To aid the doctors doing the actual solicitation, we have prepared simple contribution cards for each member of the state association, giving the solicitor something physical to work with. He can either leave it with the potential giver to fill out and mail in to the state association, or better yet get it filled out on the spot and take it with him.

"Doctors gave $984,000 last year to AMEF, but the actual need was about 10 million dollars. This is the deficit that our medical schools have each year.

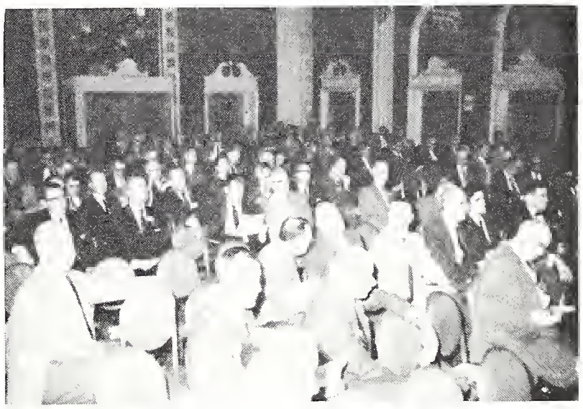
"We are getting a big boost from our Auxiliaries. Last year the Auxiliaries gave $126,188. As you know, AMEF is one of their major programs each year."

MISSOURI HOSPITAL ASSOCIATION

Dr. Francka announced that he had been asked to speak to the Missouri Hospital Association.

BASIC SCIENCE COURSES

Dr. Furlow announced six courses in Basic Sciences which will be presented by the St. Louis Medical Society in cooperation with the faculties of St. Louis and Washington University Schools of Medicine.



Sessions of the House were well attended.

Meeting of December 13, 14, 1958

The Council met at the Coronado Hotel, St. Louis, December 13, 14, 1958, with J. H. Summers, M.D., Lebanon, Chairman, presiding. Those present were Drs. Summers, Donald M. Dowell, Chillicothe; B. L. Murphy, Hannibal; Leonard T. Furlow, St. Louis; Joseph C. Creech, Troy; B. M. Stuart, Boonville; W. W. Tillman, Springfield; Ben M. Bull, Ironton; W. F. Francka, Hannibal; R. O. Muether, St. Louis; John I. Matthews, Jefferson City; Joseph C. Peden, St. Louis; Durward G. Hall, Springfield; Oscar P. Hampton, University City; Earl L. Loyd, Jefferson City; Daniel B. Landau, Hannibal; H. M. Hardwicke, Jefferson City; Messrs. John W. Noble, Kennett; T. R. O'Brien, Ray McIntyre, Jordan Singleton, Lemoine Skinner, Bill Logan, Hollister Smith, St. Louis. Members of the Board of Medical Examiners sat with the Council for a time.

The minutes of the last meeting of the Council were approved.

LIBRARY FACILITIES

A letter suggesting that the Association make arrangements with a library for use of members out in the state was read. It was pointed out that the Library of Congress was available and that library memberships could be held in libraries in the state. It was decided that copies of the letter be sent to St. Louis Medical Society and to Jackson County Medical Society for their consideration.

INSURANCE

The possibility of an arrangement for members of the Association to obtain group insurance was discussed and on motion of Dr. Dowell it was voted that a committee be appointed to work with a consultant in obtaining information to be presented at a later date to the Council.

FIELD SECRETARY'S REPORT

Mr. McIntyre reported on new and proposed hospitals in the state. He said that the Texas County Memorial Hospital at Houston has just opened and that one at West Plains would open shortly. Under construction he listed hospitals or additions at Jefferson City, Brookfield, Columbia, Sedalia, Poplar Bluff, Fulton, Waverly. Those that are being planned are in Ripley County, Carrollton, Butler, Eldorado Springs, Fredericktown, St. Charles, Hannibal, Fayette, Potosi and Unionville. The possibility that some unnecessary hospitals might be built was discussed. Mr. McIntyre discussed the staffing problem at the University of Missouri Medical Center and the question of training personnel was discussed. Several outstanding meetings in the state were reported.

COMMITTEE ON FRACTURES

A letter from the Committee on Fractures was presented which stated in part: "The Fracture Committee is opposed to any change in present definition of Chiropody as defined in the statutes in the State of Missouri." On motion of Dr. Furlow, the report was accepted with the suggestion that the Chairman advise the Chiropody organization of this action.

A.M.A. SESSION

Drs. Hall and Peden reported on the Minneapolis meeting of the American Medical Association. (Report appears in the January issue of Missouri Medicine.) Dr. Hall asked that the A.M.A. delegates be instructed concerning their stand concerning Dr. Robbins for the Board of Trustees and Dr. Lull for President-Elect. On motion of Dr. Tillman, it was voted that letters of commendation go to the delegates and that they be instructed to use their own judgment concerning candidates for office.

DIVISION OF HEALTH

Dr. Hardwicke said that the Division of Health was doing only 35 per cent of the work that law would allow and that an increase of 32 per cent in the budget for the next year was being asked, principally for the purpose of increasing personnel. He discussed the change in the Hill-Burton law and said that hereafter physicians from the community requesting a hospital would be asked to serve on an advisory committee. He discussed a proposed Premature Center at Cape Girardeau, also one in existence in Springfield, and said that he had not asked for an appropriation for the continuance of such Centers. He said that an immunization trial will be carried out in Jefferson County in cooperation with the school board toward the requirement of immunization of children for school entrance. The difficulty of establishing well baby clinics in some counties because of the lack of M.D.'s was presented. A fact sheet was presented and some of the items given, as "Only 30 per cent of food and drugs processed and sold in the state can be inspected" were discussed. At Dr. Hardwicke's request that the budget request of the Division be reviewed, on motion of Dr. Dowell, it was voted that the Advisory Committee to the Division be asked to do this.

LEGISLATION

Possible legislation that may be presented in the coming session of the Legislature was discussed briefly including legislation concerning optometry similar to that introduced in 1957 session; legislation to place all examining boards in the Department of Commerce; legislation to place Blue Cross and Blue Shield under the Insurance Commissioner; vendor legislation which presently appears will be restricted to hospital care for acute cases of the aged and disabled, involving from 1 to 3 million dollars. The work of the Committee on Alcoholism was reviewed in regard to obtaining legislation and this was deferred awaiting action of the Budget Committee.

FREE CHOICE OF PHYSICIAN

A general discussion took place on free choice of physician, panel practice, institutes as the one at St. Louis City Hospital, the report of the Commission on Medical Care Plans of the A.M.A., the problem of the Blue Shield in paying to other than physicians, and other socio-economic questions involving medical and hospital practice today. The report of the Commission on Medical Care Plans takes up two large volumes and was tabled by the A.M.A. delegates in Minneapolis until the June 1959 meeting, to give the states an opportunity to study it and come to some conclusion. In effect, however, the report suggests a re-examination of the entire principle of free choice. The delegates adopted the following statement in this connection:

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Hotel Muehlebach
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1. Dr. Perry presents Past President's Key to Dr. Francka. 2. Dr. Winters was the banquet speaker. 3. Fifty year physicians received their 50 year pins: Drs. Leo E. Wilucki, St. Louis; Forrest Thomas, St. Joseph; Charles Sandy, Prairie Village, Kansas; Robert P. Price, St. Joseph; David C. Perry, Mound City; Charles D. Osborne, Sedalia; Frank B. Long, Sedalia; Robert D. Irland, Kansas City; Marvin B. Ketron, Kansas City; Frank Hurwitt, Kansas City; Carl Hobart, St. Louis; Leon A. Feinstein, St. Louis; Richard S. Weiss, St. Louis; Claude J. Allen, Rich Hill; James W. Graham, Kansas City; Clara P. Mutshnick, St. Louis; Charles S. Thomas, St. Louis. 4. Past Presidents were honored at the banquet: Drs. McVay, Mueller, Bloom, Thompson, Magness, Petersen, Buhler, Vohs and Sewell. 5. A portion of the guests at the banquet paused for a photograph. 6. Dr. Francka presided at the banquet. 7. Dr. Francka presented the traditional gavel to Dr. Perry.

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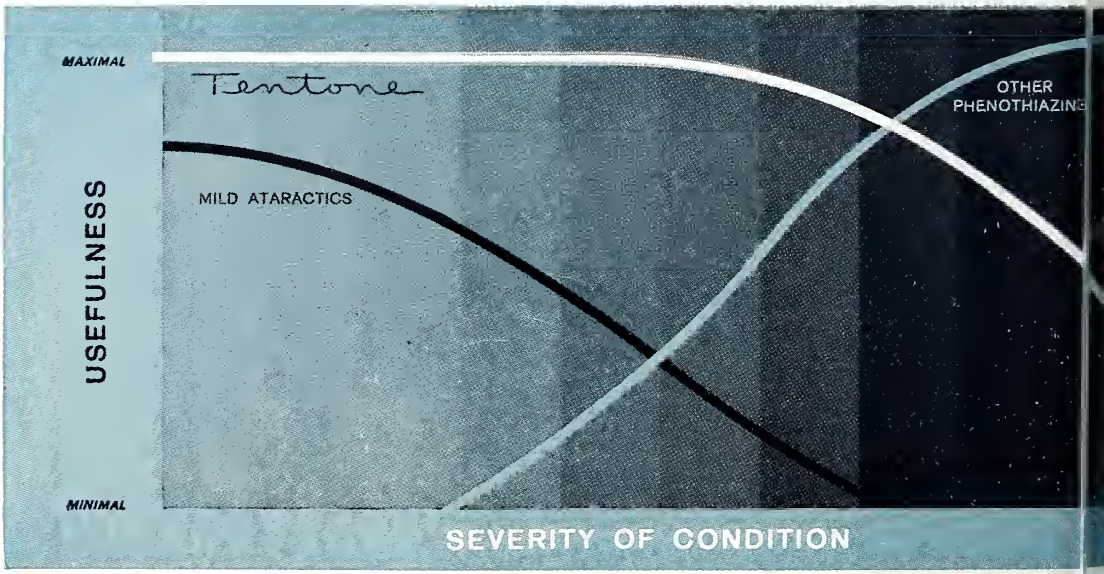

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NEW PHENOTHIAZINE COMPOUND FOR THE LOWER AND MIDDLE RANGE OF DISORDERS

◆ Positive, rapid calming effect in mild and moderate cases. ◆ Striking freedom from organic toxicity, intolerance, or sensitivity reaction—particularly at low dosage. ◆ Greater freedom from induced depression or drug habituation. ◆ May be useful, as with other tranquilizers, to potentiate action of analgesics, sedatives, narcotics. ◆ Facilitates management of surgical, obstetric, and other hospitalized patients. ◆ Indicated when more than a mild sedative effect is desired...and less than psychosis is involved. ◆ Dosage range: *In mild to moderate cases:* from 30 to 100 mg. daily. *In moderate to severe cases:* from 75 to 500 mg. daily.

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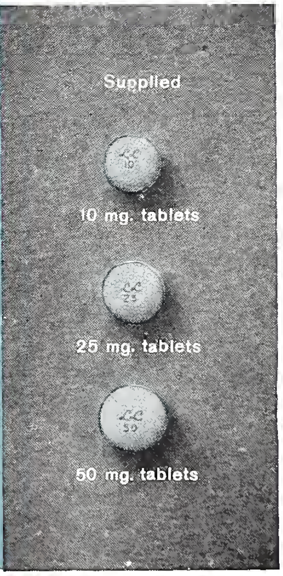


"We respectfully suggest to the constituent associations reviewing the report in the interim, that their attitude regarding the report will be clarified if they arrive at some decisions in regard to the following basic points:

"1. Free Choice of Physician—Acknowledging the importance of free choice of physician, is this concept to be considered a fundamental principle, incontrovertible, unalterable and essential to good medical care without qualification?

"2. Closed Panel Systems—What is or will be your attitude regarding physician participation in those systems of medical care which restrict free choice of physician?

"These suggestions acknowledge that the policy of the American Medical Association to encourage and support the highest quality of medical care for all patients remains unchanged. They question, however, whether attitudes toward the free choice of physician and the closed panel system may be undergoing evolutionary change."

A panel on "Staphylococcus Infections" opened the session.

The state associations are invited to forward their replies to these questions to the A.M.A. 60 days in advance of the June session.

On motion of Dr. Muether it was voted that the Council act as a committee of the whole to make a definitive study of the problem of corporate practice of medicine, the Commission report, the principle of free choice of physician and the questions suggested by the A.M.A. House of Delegates, and attempt to formulate all of the possible alternate courses that MSMA might follow, including the possible consequences of those courses, and the actions that would have to be taken to implement them, and that a summary of the various courses be prepared for the consideration of the MSMA House of Delegates.

COMMITTEE ON CARDIAC DISEASES

Dr. Loyd presented a questionnaire for the purpose of gaining information on the number of cases of rheumatic fever and congenital heart disease in the state which the Committee recommended be sent out by the Missouri Heart Association. On motion of Dr. Tillman, it was voted to approve the survey. It was pointed out that it was expected that results of the survey would be published in MISSOURI MEDICINE.

Dr. Loyd reported on tape recordings which have been produced by the Greene County chapter and with the approval of the Medical Society and recommended that these be made available to radio stations. On motion of Dr. Francka, the tape recordings were approved. Dr. Loyd reported that the Committee had requested approval of the Council on prophylactic work in heart disease. It was felt that the Council should not act on scientific matters.

INFANT AND CHILD CARE

Dr. Landau reported a meeting of the Committee at which Dr. Fred Hein of the A.M.A. spoke and quoted him: "There is need for doctor advice and participation in school health programs on all local and state levels. School people want the help of the practicing physician as well as that of the full-time school physician, but they are somewhat reluctant to take the initiative in asking for it. No school health program can succeed, as it should, without participation of the local physicians in both the planning and executing phases." Dr. Landau said that traffic accidents and deaths involving teen-age drivers were cited as increasing problems demanding more attention and united efforts toward solutions. He said the Committee felt this should be included for discussion in school health workshops. He said that the Committee recommended (1) That the Council again recommend to the County Medical societies the appointment of a school health committee for each county society. (2) That a state-wide meeting on Physicians and Schools be developed and held—that a small planning committee composed of representatives of the Missouri Division of Health, the Missouri Department of Education, the Missouri Dental Association and the Missouri State Medical Association meet under chairmanship of Dr. H. M. Hardwicke and plan, and call this state-wide meeting. On motion of Dr. Tillman these recommendations were approved.

TREASURER'S REPORT

Dr. Muether reported on the present financial status of the Association and said that Mr. Rabbitt and Mr. Weidert of the Mercantile Trust Company would speak to the Council on the Association's investments. Mr. Rabbitt recommended that the Association change its investment program to permit purchase of 25 per cent of assets in common stocks over a gradual period. On motion of Dr. Furlow, the treasurer was authorized to so advise the Trust Company.

ANNUAL SESSION

It was reported that all sessions of the 1959 Annual Meeting would be held in the Muehlebach Hotel. The scientific program was reviewed briefly. The question of scientific exhibits was discussed, it being brought out that they are a valuable part of a scientific session but that it is unfair to attempt to have them when there is not sufficient space and facilities, as will be the case at the 1959 session. On motion of Dr. Muether, it was voted that there be no scientific exhibits or hobby show at the 1959 session.

EXECUTIVE SESSION

The Council went into executive session to consider the budget and the report of the Committee on Alcoholism.

REPORT OF BUDGET COMMITTEE

On motion of Dr. Muether, the following budget for 1959 was adopted:

BUDGET FOR 1959

Salaries	$ 57,900.00
Office Rent	4,700.00
Postage	6,000.00
Printing, stationery, office supplies	5,000.00
Journal expense, printing and paper	45,000.00
Telephone and telegraph	2,500.00
Employee Insurance and Retirement Plans	6,500.00
Professional Fees	4,000.00
Taxes Payroll	1,700.00
Travel Expense	7,000.00
Committees	36,975.00
Furniture and Fixtures	1,200.00
General Expense	3,000.00
	$181,475.00

COMMITTEE ON ALCOHOLISM

The Budget Committee reported "The Council has received the published study and the recommendations of the Committee on Alcoholism. The broad policy of the Association in this area has now been defined. The matter is now in the hands of the Council and will be pursued as circumstances and the best judgment of the Council may determine."

The following, on motion of Dr. Francka, was passed: In the light of the recommendations of the Budget Committee—and in order that the Association's program in the matter of alcoholism may be appropriately related to the over-all program of the MSMA—the Council will assume direct responsibility for all matters included in the recommendations and study of the special Committee on Alcoholism and that Committee is now discharged.

NEXT MEETING

It was decided to attempt to plan that the Council begin its work on Friday evening, February 20, to allow members who will also attend the Missouri Medical Service annual meeting on February 22, to attend both meetings.

Meeting of February 20, 21, 1959

The Council met at the Coronado Hotel, St. Louis, on February 20, 21, 1959, with J. H. Summers, M.D., Lebanon, Chairman, presiding. Those present were Drs. Summers, Donald M. Dowell, Chillicothe; B. L. Murphy, Hannibal; Leonard T. Furlow, St. Louis; Byron M. Stuart, Boonville; C. G. Stauffacher, Sedalia; W. W. Tillman, Springfield; Ben M. Bull, Ironton; W. F. Francka, Hannibal; Ralph Perry, Kansas City; John I. Matthews, Jefferson City; R. O. Muether, St. Louis; Oscar P. Hampton, University City; H. M. Hardwicke, Jefferson City; Joseph C. Peden, St. Louis; W. S. Sewell, Springfield; Messrs. John W. Noble, Kennett; T. R. O'Brien, Ray McIntyre, Jordan Singleton, Lemoine Skinner, Hollister Smith, St. Louis; John Buckner, Springfield. Dr. R. A. Michael, president of the Osteopathic Association and Mr. Paul Adams, secretary of the Osteopathic Association, met briefly with the Council on Saturday.

ROSTER REQUESTS

It was reported that requests were often made from other than members for the roster issue of MISSOURI MEDICINE and that these were complied with for the price of a year's subscription or not complied with. This method of handling, using discretion in furnishing the roster, on motion of Dr. Dowell, was approved.

INFERTILITY CLINIC

A letter from St. Louis University School of Medicine announcing the opening of a clinic on Infertility and Sterility was read. After discussion, on motion of Dr. Perry, this was referred to the Committee on Maternal Welfare.

TREASURER'S REPORT

Dr. Muether gave the financial statement and stated that the report of the audit would appear in the March issue of MISSOURI MEDICINE. On his motion, the report was accepted.

S.B. 50

Copies of S.B. 50 (Single Licensure) were presented, together with a bulletin of the Missouri Hospital Association. A list of amendments suggested by the Missouri Hospital Association was presented and studied individually. Letters and excerpts of letters from hospital personnel in opposition to the bill were read and a review of the activities of that association against the bill were reviewed. After full discussion the following actions on the amendments suggested by the Hospital Association were taken:

Referring to Sec. 1, page 2, lines 5 to 13, on motion of Dr. Bull, was retained with the possibility of modification at the discretion of Mr. Noble, the Association's attorney.

On motion of Dr. Furlow, by a vote of 6 to 5, the words, "It may, by regulation, formulate, adopt and enforce Codes of Professional Conduct governing the professional activities of its licensees" on page 4, Sec. 3, lines 49 through 51, and the words "(A) Violation of the Code of Professional Conduct," page 11, line 9, were agreed to be stricken from the bill.

A suggested change on page 12, line 9, changing the word "person" in two places to "physician," on motion of Dr. Tillman, was not accepted.

A suggested change on page 15, Sec. 18, by inserting the substance of Section 334.010 in lieu of Section 18(a), on motion of Dr. Furlow, was not accepted.

A suggested change on page 16, Section 20, lines 3 to 5, by striking out "or is treating the sick or practicing the healing arts except as is authorized by this act" on motion of Dr. Muether, was not accepted.

OTHER LEGISLATION

A suggested letter on other legislation before the present session was presented and discussed. The letter, dealing with S.B. 50, Joint Licensure, S.B. 24, Chiropractic H.B. 220, Blue Cross-Blue Shield, H.B. 27, Licensing unlicensed physicians, and H.B. 1, Vendor Legislation, was approved with H.B. 27 deleted from the letter on motion of Dr. Dowell.

MENTAL HEALTH

The report of the Committee on Mental Health was presented and discussed. Following discussion, on motion of Dr. Bull, the report was accepted.

DIVISION OF HEALTH

Dr. Hardwicke explained his budget request to the Legislature, as contained in H.B. 64. He stated that more personnel is needed and that about 40 additional nurses had been requested. He said that H.B. 209 would make it possible for the Division of Health to collect fees, as do many other states, for various services rendered such as engineering service, and also allow actual costs to be charged in such things as birth certificates. If this bill passes, the amount of the appropriation requested could be reduced. He stated that biologicals and vaccines will not be given to organizations next year unless requested by a physician.

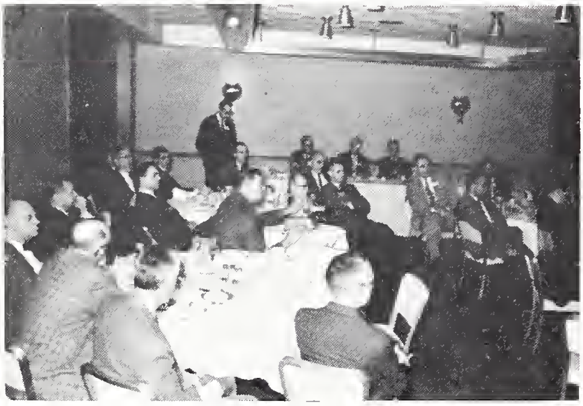
Dr. Hardwicke stated that aid to the two premature baby clinics in Missouri, now financed by the Division of Health, would be cut to 50 per cent during the rest of this year, to 25 per cent the following year and after that, no aid would be given. He said that any new premature baby clinic established hereafter would receive 75 per cent of budget the first year, 50 the second year, 25 per cent the third year and no aid after that. On motion of Dr. Tillman, Dr. Hardwicke's statement on premature clinics was approved. On motion of Dr. Furlow, the budget as presented in H.B. 64 was approved in principle.

CORPORATE PRACTICE

A suggested report of the Council for the Delegates Handbook on "The Corporate Practice of Medicine" was presented. After ramifications and different situations which might be termed corporate practice or might not was discussed, on motion of Dr. Muether, it was voted to place the report with some changes in the Handbook.

FREE CHOICE AND PANELS

In compliance with the A.M.A. request that state associations present recommendations at the June session concerning free choice of physician and closed panel systems, a suggested digest for inclusion in the Delegate's Handbook was presented. After full discussion and the feeling expressed that the Council might make more definite recommendations, on motion of Dr. Muether, the report was approved for inclusion in the Delegates' Handbook.



University of Missouri Medical Alumni held a luncheon meeting.

PENSION PLAN

Representatives of Pension Associates presented a pension plan for employees, which had been approved by the Treasurer and by the Budget Committee in principle. On motion of Dr. Muether, the plan was approved. On motion of Dr. Dowell, trustees of the plan were named as Mr. Noble, Dr. Muether and Mr. O'Brien.

INSURANCE

A proposal made by the Metropolitan Casualty Company to offer insurance to provide hospitalization and nursing care for members under age 70 was presented. On motion of Dr. Furlow, this was approved in order that agents of the company might promote the sale of this policy.

CRIPPLED CHILDREN'S SERVICE

A letter from President Ellis of the University of Missouri concerning work and request to the Legislature for appropriations for the work of the Crippled Children's Service was presented. The request to the Legislature included changes in the present law, placing all activities under the Board of Curators of the University and allowing the collection of insurance on cases. After discussion, it was felt that the suggested legislation was too broad in scope to allow the Council to express definite opinion, and on motion of Dr. Tillman, it was voted not to approve as now proposed because of the wide scope of the propositions.

H.B. 232

H.B. 232, which would place the Board of Medical Examiners and all other licensing boards under the Department of Business and Administration, also changing the make-up of the board and its rights, was discussed by the Council and Dr. Sewell. On motion of Dr. Matthews, it was voted to oppose H.B. 232.

COMMITTEE ON REDISTRICTING

Dr. Sewell presented the report of the Special Committee on Redistricting for the information of the Council. The report is to be made directly to the House of Delegates.

FIELD SECRETARY'S REPORT

Mr. McIntyre called attention to several county societies which had elected their newest members as officers of the society.

He reported that four preceptees from the Senior class at the University of Missouri School of Medicine were at present with physicians in private practice; that four more would start on March 2 and that two more would go out the last six weeks of the school year, ten in all choosing to do this.

Mr. McIntyre reviewed the 23 graduates of the 1957 class at the University of Missouri which showed that one graduate was now in practice in outstate Missouri.

By-laws submitted by the Boone County Medical Society were presented and on motion of Dr. Stuart were approved with some recommended changes. He also mentioned a number of county society and committee meetings he had recently attended and gave dates of some important coming meetings.

LIBRARY SERVICE

Dr. Furlow asked permission of the Council for the St. Louis Medical Society to circularize the Association membership offering library membership in the Society. This was approved.

The Speaker referred this portion of the Council report to the Reference Committee on Reports of Officers.

J. H. SUMMERS, M.D., Lebanon: The Council recommends to the House of Delegates the adoption of the following resolution:

KEOGH BILL

WHEREAS, The Federal income tax laws of the United States are inequitable for self-employed persons, including the majority of practicing physicians, in that they do not allow them the tax relief accorded corporations and employees in deferring taxation of reasonable amounts of current income set aside for retirement programs, and

WHEREAS, House Resolution No. 10, introduced by Representative Keogh, would correct this manifest inequity, and

WHEREAS, House Resolution No. 10, having been passed by the House of Representatives, is now under consideration by the Senate Committee on Finance, and

WHEREAS, The members of the medical profession in Missouri, both present and future, have a direct and important interest in this effort to help the self-employed provide for their own security in retirement, now therefore be it

Resolved, That this House of Delegates go on record as supporting House Resolution No. 10, and be it further

Resolved, That a copy of this resolution be sent to the two Missouri Senators and to Senator Harry F. Byrd, Chairman of the Senate Committee on Finance.

The Speaker referred this resolution to the Reference Committee on Resolutions.

DR. SUMMERS: The second portion of the supplemental report of the Council is as follows:

AGING

The question of health care for the aging has recently been receiving national prominence in its many aspects. Increased attention has been concentrated upon it in the federal Congress, through federal and state administrative agencies, and through many private organizations, including the A.M.A.

The medical profession, and MSMA, have been at work in this field for many years. But with the heightened interest in the question, and the recent designation of an A.M.A. committee on the subject, the Council asked the MSMA Committee on Hospital and Professional Relations to further emphasize their activities in this field.

Upon study, however, and investigation of new national, state and local efforts in connection with the aging, the committee has suggested that a special group be formed with the single purpose of dealing with this question. It is their feeling that, because of the nature and extent of the activities in this field, a separate committee is needed, not only to study the question and make recommendations to the Association, but to coordinate with A.M.A. and local society committees dealing with the aging, and to establish liaison with other organizations interested in this field.

At the same time, it was felt that additional study of the care of the aging by the Committee on Hospital and Professional Relations might assume such proportions as to completely envelop their important work in other areas.

The Council agrees with the committee's suggestions, and, with the committee, recommends that the bylaws of the association be amended to provide for a standing permanent Committee on Aging.

The Council therefore submits the following resolution:

St. Louis County Medical Society delegates discuss a question.

WHEREAS, Questions concerning the health care of the older age groups are assuming major importance, and

WHEREAS, The Missouri State Medical Association has traditionally accepted the responsibility to provide leadership in all areas of health care, therefore be it

Resolved, That the By-Laws of the Missouri State Medical Association be amended to provide for a standing Committee on Aging as follows: Amend Chapter 7, Section 2 (page 7) by adding, immediately following "A Committee on Physical Medicine and Rehabilitation," the following:"A Committee on Aging," and further amending Chapter 7, Section 2 (page 8), by adding immediately before Section 3, the following: "The Committee on Aging shall consider matters concerned with the problems of our aging population in relation to health care."

The Speaker referred this portion of the report of the Council to the Reference Committee on Amendments to the Constitution and By-laws.

DR. SUMMERS: The next portion of the supplemental report of the Council deals with free choice of physician.

Free Choice of Physician

In consequence of the report of the American Medical Association's Commission on Medical Care Plans to the A.M.A. House of Delegates in December, 1958, and in an effort to determine present attitudes of the medical profession toward free choice of physician and closed panel systems of medical care, all state associations have been asked to offer their replies to the following statement adopted by the A.M.A. delegates:

"We respectfully suggest to the constituent associations reviewing the report in the interim, that their attitude regarding the report will be clarified if they arrive at some decisions in regard to the following basic points:

"1. Free Choice of Physician—Acknowledging the importance of free choice of physician, is this concept to be considered a fundamental principle, incontrovertible, unalterable, and essential to good medical care without qualification?

"2. Closed Panel Systems—What is or will be your attitude regarding physician participation in those systems of medical care which restrict free choice of physician?

"These suggestions acknowledge that the policy of the American Medical Association to encourage and support the highest quality of medical care for all patients remains unchanged. They question, however, whether attitudes toward the free choice of physician and the closed panel system may be undergoing evolutionary change."

The answers which the Missouri State Medical Association gives to these questions will be used, of course, for the guidance of our Delegates to the A.M.A. House when action is taken on the report of the Commission at the June, 1959, session of the A.M.A.

It is the feeling of the Council that these are important questions upon which the MSMA House of Delegates, cognizant of the attitude of Association members throughout Missouri, should determine our course. In view of the effect that the coming A.M.A. action may have on the future practice of medicine, the Council also feels that the MSMA House should consider these questions deliberatively, with due regard to the full meanings and possible consequences of the answers decided upon.

To aid the House in its work, the Council, meeting as a committee of the whole, has drawn up a series of suggested positions that the Missouri State Medical Association might take on these matters. It should be made clear that the Council does not advocate any particular one of these positions, but has tried, instead, to outline various possible alternative attitudes in the situation to provide the delegates with a starting point for discussion. It is hoped that the House can determine that one which reflects the attitude of the medical profession in Missouri, and which will, in the ultimate view, serve the best interests of the patient.

DEFINITIONS

In its discussions in this area, the Council found it useful to define the terms "free choice of physician," and "closed panel system."

Free choice of physician, in this context, was taken to mean the freedom of the patient to select, from the entire physician population, the physician whom he wishes to have attend him, without incurring financial penalty regarding any medical care prepayment funds in which the patient may have an interest.

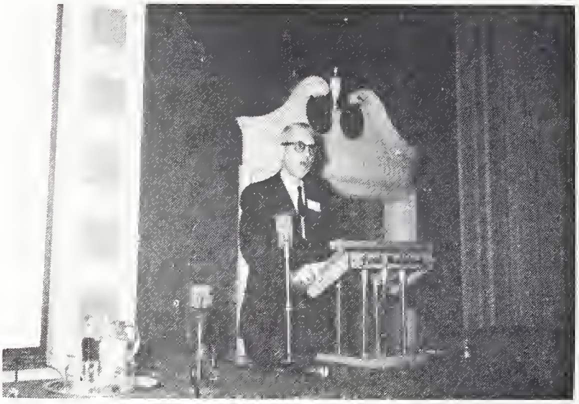
A closed panel system was taken to mean any system for providing medical care which includes all of the following elements as essentials:

1. Prepayment financing—whether funds are provided through an employer, labor organization, mutual benefit association or similar organization, or by the individuals within a consumer group themselves.
2. Care provided by a designated and limited group of physicians—whether such physicians have status as employees, panel members by contract, or partners in a private organization offering prepaid services, or whether they are compensated on a salary, capitation or income division basis.
3. The patient, in order to receive the benefits for which he has prepaid, or which have been prepaid on his behalf, must seek care through the system, being limited in his choice of physician to the members of the designated group of panel physicians.

FREE CHOICE OF PHYSICIAN

The Council offers the following possible positions concerning the concept of free choice of physician for discussion by the House of Delegates:

1. Free choice of physician under any and every circumstance is a fundamental principle, essential to good medical care without qualification. The patient's freedom to choose his own physician is, without question, essential in the provision of good medical care. Since medicine is not a science alone, but also an art, and since successful therapy includes psychologic factors as well as physical, the patient's welfare depends on his freedom to seek medical care from any source available, to select his own physician by whatever personal criteria he may choose, and to change physicians whenever he feels it advisable.
2. Free choice of physician is essential in major areas of medical care, but is not essential in all areas. While good medical care can be provided only if the patient has free choice of physician in major areas of therapy and in cases of serious illness or injury, free choice of physician is not essential to good medical care in such areas in which the doctor-patient relationship is actually a limited one. Areas in which free choice is not essential would include, as examples, diagnostic survey work, routine physical examinations, pathologic and diagnostic x-ray services, treatment for minor illness or injury, immunizations, etc.
3. Free choice of physician is important, but is essential only in that the patient have ultimate access to another physician. Good medical care can be provided without absolute free choice of physician, so long as the patient has the opportunity, even though limited, to change physicians in case of personality conflicts or similar problems, or so long as the patient has some effective recourse, beyond the attending physician, if he feels the care received is not what it should be.



Dr. Duval addressed the scientific session.

4. Free choice of physician is not essential so long as the care of the patient is directed by physicians, without restriction by non-medical personnel. Free choice of physician by the individual patient is not essential to good medical care, so long as physicians, who alone are in a position to judge the real quality of medical care, manage and direct the medical affairs of any program under which care is provided, without restrictions or interference by non-medical personnel.
5. Free choice of physician is not essential to good medical care under modern conditions. At present levels of medical and social development, free choice of physician in various formal programs for the pro-

vision of medical care is not essential, since good medical care can be assured by reliance on:

(a) The ethical and scientific sense of responsibility of the physicians participating in the programs

(b) The responsibility of the non-medical officials charged with operating the programs to satisfy their constituents for whom the care is provided

(c) The knowledge and enlightened desires of those who pay for the care, and, finally

(d) The knowledge and enlightened desires of the consumers who receive the care.

The Speaker referred this portion of the report of the Council to the Reference Committee on Miscellaneous Affairs.

Dr. Summers: Further supplemental report of the Council on closed panel practice appears in the Delegates' Handbook as follows:

Physician Participation in Closed Panel Systems

Bearing in mind that the Association's position in regard to closed panel systems should be consistent with its position concerning free choice of physician, the Council offers the following possible expressions of attitude toward physicians who participate in systems of medical care which restrict freedom of choice.

1. Since a physician is professionally and ethically dedicated to the provision of good medical care, and since free choice of physician is a fundamental principle, essential to good medical care without qualification, a physician may not ethically participate in any closed panel system which restricts the patient's freedom of choice of physician. (Ref.—Free Choice position No. 1.)

2. A physician may ethically participate in a closed panel system so long as the patient's freedom of choice of physician under the system is restricted only in minor areas of medical care in which the doctor-patient relationship is actually a limited one. Minor areas of care would include, for example, diagnostic survey work, physical examinations, treatment for minor ills, etc., but not major areas of therapy or cases of serious illness or injury. (Ref.—Free Choice position No. 2.)

The banquet gave opportunity for many greetings.

3. So long as the patient receiving care under a closed panel system has ultimate access to other physicians, such as, for example, the opportunity to change to another participating physician in case of personality conflict, physicans may ethically participate in the system. (Ref.—Free Choice position No. 3.)

4. So long as the medical affairs of the closed panel system involved are managed and directed by physicians, without interference or restriction by non-medical personnel, physicians may ethically participate, no matter what restrictions may be placed on the patient's freedom of choice of physician. (Ref.—Free Choice position No. 4.)

5. So long as a physician, in his relationship with a closed panel system, is personally satisfied that he is rendering service under conditions which are not in violation of that principle of medical ethics which states: "A physician should not dispose of his services under terms or conditions which tend to interfere with or impair the free and complete exercise of his medical judgment and skill or tend to cause a deterioration of the quality of medical care," he may ethically participate in closed panel systems of any kind, under any conditions satisfactory to him individually. (Ref.—Free Choice position No. 5.)

6. So long as a physician is personally satisfied that he is maintaining the ordinary ethical and professional standards which apply to all physicians, he is privileged to practice his profession as he sees fit and may ethically participate in closed panel systems of any kind, under any conditions satisfactory to him individually. (Ref.—Free Choice position No. 5.)

7. Each closed panel system for the provision of medical care must be judged on its own merits. Each component medical society in whose area such a system may be operated should provide a formal arrangement for inquiry and examination into the conditions under which medical care is rendered through such closed panel systems, and the quality of care provided, with a view to registering approval or disapproval of each individual program, and approval or disapproval of the participation of physicians in the particular program considered.

8. While the principle of free choice of physician is an important one, it is not the only factor to be considered in determining the effect of closed panel systems on the provision of medical care. Certain economic factors concerned with the collection and expenditure of funds to pay for care are inherent in any closed panel system, and these factors are largely beyond the control of the individual patient and participating physician. Because of these factors, it seems apparent that restrictions and limitations on the provision of medical care must inevitably enter into closed panel systems. Since at least part of the decision as to what care is to be rendered and received will thus be taken away from the individual physician and patient concerned, such restrictions must eventually lead to a deterioration of the care provided. For these reasons, physicians should not lend support to closed panel systems of medical care.

The Speaker referred this portion of the report of the Council to the Reference Committee on Miscellaneous Affairs.

Dr. Summers: Further supplemental report of the Council on the corporate practice of medicine appears in the Delegates' Handbook as follows:

The Corporate Practice of Medicine

During the year the Council has been increasingly concerned with situations which include the elements of what might be termed the corporate practice of medicine.

Many of these situations reflect the long-term trend toward provision of medical services by institutional entities—a trend which it is apparent, is growing in momentum. Medical care now being provided under institutional control ranges from one or more services such as anesthesia, radiology, pathology and physiotherapy, to complete medical and surgical care of the patient.

Dr. Growdon thanked Dr. Ochsner for his presentation.

In certain of these situations, the problems are immediate and pressing. Notable among these is the problem encountered by the St. Louis Blue Shield Plan, which is under the sponsorship of the Missouri State Medical Association. Blue Shield, in attempting to follow policies laid down by the medical profession for the good of the patient has found itself in the difficult position of having to refuse benefits for services provided by certain institutional entities—when such benefits are not paid to physicians—while at the same time the institutions are attempting to enforce their charges against Blue Shield members who feel, with some reason, they have a right to expect Blue Shield benefits to be paid on their behalf. The broad problem boils down to that of defining what may be proper and what are clearly improper arrangements by which services of doctors are made available to patients through various kinds of organizations or institutions.

CORPORATE PRACTICE

The elements of the corporate practice of medicine lie in any system which involves the employment of a physician by an individual or organization (other than an individual physician or an organization composed solely and exclusively of physicians) for the purpose of rendering medical care or services to patients, and the fees or remuneration for such services are collected by the organization, by a department thereof, or by an associated organization, and used for its general purposes rather than fully for the direct compensation of the physician rendering the care.

The fundamental danger to good medical care under such systems is that the physician does, or may come to, feel primary responsibility or loyalty to the organization by which he is employed, rather than to the individual patient to whom he renders service.

There are other problems in such systems, well recognized by most physicians. Among these is an increased dependence of the patient on more or less impersonal institutions for care, rather than on a personal relationship with an individual physician. Such systems may also promote criticism of physicians for high costs of medical services, when in reality these costs are being overstated by the institutions in order to collect funds for other phases of their operations.

PROBLEMS OF INSTITUTIONS

The problem of corporate practice today is a complex one. In most instances it is not a case of the organization or institution simply desiring to enter into the practice of medicine and to sell the services of employed physicians for a profit. Generally, there is no question about the purpose of the institution to serve the patient and to render good care.

The practices which have grown up in the provision of medical services by institutional entities—practices which seem to be expanding rapidly—are largely the result of financial problems experienced by our health care institutions. In addition, although to a much lesser degree, the problems attendant on the education and training of health care personnel have sometimes encouraged such practices.

(It is the opinion of the Council, however, that in no case have these practices been necessary primarily or simply to insure good medical care for the individual patient.)

Certainly no other group appreciates the financial problems facing health care institutions more than the medical profession. Certainly no other group recognizes the problems that have arisen in medical education to a greater degree than the physicians. No other group is more conscious of the necessity for good, sound health care institutions and the highest quality medical training programs.

At the same time, the medical profession has the deepest responsibility to insure the provision of the best possible medical care, to promote the methods which in the long run will serve the best interests of the patient and to do everything it can to eliminate practices which lead to the deterioration of the quality of medical care.

DEFINITIVE ACTION REQUIRED

This is not the first time, of course, that some of these situations have been brought to the attention of the House of Delegates. On several occasions in the past, the House has expressed its opinion on some of these questions, particularly in the area of what constitutes the practice of medicine. The Council and the Association have been guided by these particular decisions so far as they have gone. Our Association has not, however, come to grips with the problem as a whole nor has it defined our over-all policy as to how we shall deal with it.

The Council believes, however, that because of the spread of these practices the time has come for medicine in Missouri to take definitive action. The Council believes that the profession should decide now what its attitudes are and will be toward these complex situations, and then move to implement those decisions by whatever action is called for.

If medicine in Missouri believes that the dangers which may be inherent in some of these situations are minor, compared with the benefits to be derived from the continuation or expansion of the practices now being followed in the provision of medical care by institutional entities, then we should state our approval of such practices as we support, including any limitations or conditions that we believe necessary.

If, on the other hand, medicine in Missouri believes that the dangers in any of these situations outweigh any benefits which may be obtained, we should state our condemnation, and support this by whatever action necessary, including litigation or legislative process if needed, to force cessation of such practices.

ATTITUDE OF PROFESSION

In determining its attitude toward the provision of medical care by institutional entities, the Council recommends that the House of Delegates consider the question in light of the type of services being furnished, the personnel rendering the services and the type and purpose of the organization purveying the care.

Consideration should also be given to the probable effect of sanctioning or condemning a practice in any particular type of institution on the care of the patient and on the purposes of the institution affected.

Generally, the services being furnished by various institutions over the state cover:

1. Diagnostic services
2. Special medical services only—such as anesthesia, radiology, pathology, or physical therapy, or
3. Complete medical and surgical care of the patient.

Patients are being charged by these institutions for services rendered by:

1. Physicians employed on a salary or percentage basis
2. Residents, interns and physicians in training
3. Para-medical personnel in the fields of special medical services, and
4. Physicians who contribute their work and receive no remuneration.

Types of institutions which have been providing medical care of one form or another include:

1. Governmental institutions which are primarily tax supported, but which charge patients deemed able to pay
2. Governmental institutions which serve special groups, are tax supported and make no individual charges to eligible patients
3. Medical school facilities, privately or publicly supported, which charge patients deemed able to pay
4. General hospitals, which have teaching programs and charge for the services of physicians in training, or which employ physicians in certain departments and charge for their services, or which operate group practices
5. Charitable institutions which are primarily supported by contributions, but which charge patients deemed able to pay
6. Charitable institutions which are supported by contributions and make no charges to eligible patients
7. Closed panel systems which charge for services on either a prepayment or a post-payment basis
8. Industrial and business firms which employ physicians to furnish care to employees either with or without charges to individuals
9. Private individuals or corporations which employ physicians and purvey their services for profit.

The Council asks the members of the House to consider each of the points on both the lists set out (plus such other particular points as may suggest themselves) and endeavor to arrive at precise language, covering all such particular instances, as will state clearly the policy of organized medicine in Missouri regarding every phase and aspect of corporate practice (so far as it may be possible to do so).

Directive Requested

The Council believes the House should further determine in each instance whether the medical profession recognizes the practices currently involved in the provision of medical care by institutional entities as: inimical to good medical care; or part of the modern changing trend in medicine, and satisfactory in enabling the patient to receive good care; or not entirely desirable, but in limited areas, necessary in the long range to assure complete and efficient services for the patient and training of medical personnel.

For the guidance of the Association, the Council, in short, asks a directive from the House setting forth:

1. The practices that are sanctioned and those which are condemned, and the conditions under which approval or disapproval is given.
2. The extent to which the Association should take action against those institutions engaging in such practices as are condemned, and against physicians who participate in them.

The Speaker referred this portion of the report of the Council to the Reference Committee on Miscellaneous Affairs.

Dr. Summers: The Council has considered Senate Bill 368, which was recently introduced in the General Assembly and which would authorize the State Crippled Children's Service to charge the families of patients able to pay in part for care received. At a special Council meeting next Tuesday, President Ellis of the University of Missouri will present the reasons of the University Curators for sponsoring this legislation. The Curators administer the State Crippled Children's Service. The Council has asked me to invite the members of the reference committee that will consider this matter to attend the special council meeting at 2:00 p.m. and hear President Ellis before submitting their report to the House at its Wednesday session.

The CPC was moderated by Dr. Helwig.

The Speaker referred this portion of the report of the Council to the Reference Committee on Medical Education and Public Welfare.

Dr. Summers: One thing further on Senate Bill 50, which has been mentioned prior to my appearing here, and a copy of the bill is in the Delegates' Handbook. In addition, the minutes of the Council meeting of February 20 and 21 are also in the Handbook and show the amendments to the bill suggested by the Hospital Association. These were rejected by the Council at that meeting. Later, however, at a special meeting of a joint conference of the MSMA and the Osteopathic Association, these amendments were reconsidered and several were approved in an effort to see if the bill might be passed in this session of the Legislature, and with the advice of legal counsel that the amendments would not materially change our legal position as it now exists. This action has since been approved by the full Council. We now have word that, as a result, the hospitals have withdrawn their opposition and said they will support the bill at the hearing by the Senate Committee on Public Health and Welfare which will meet April 7. A list of these specific changes proposed in the bill has been prepared for the use of the reference committee as follows:

8
OFFICERS AND COMMITTEES

Drs. Holly and Growdon, guest speakers, paused with Dr. English who presided.

1. Page 2, Section 1—strike out lines 5 to 13. (This removes the definitions of the terms "the healing arts" and "to treat the sick.")
2. Page 4, Section 2 (3)—strike out the last three words on line 49 and all of lines 50 and 51. (This removes the provision for the licensing board to formulate, adopt and enforce Codes of Professional Conduct.)
3. Page 11, Section 10 (a)—strike out all of line 9. (This again removes reference to Codes of Professional Conduct.)
4. Page 15, Section 18 (a)—substitute the substance of the wording of the present medical practice act for the wording of the bill. (This replaces the words ". . . it is unlawful for any person not licensed and registered under this act as a physician and surgeon to practice the healing arts or treat the sick . . ." with the words ". . . it shall be unlawful for any person not now a registered physician within the meaning of the law to practice medicine or surgery in any of its departments, or to profess to cure and attempt to treat the sick and other afflicted with bodily or mental infirmities, or engage in the practice of mid-wifery in the State of Missouri, except as herein provided.")
5. Page 16, Section 20—strike out "or is treating the sick or practicing the healing arts except as is authorized by this act."
6. Page 12, Section 10 (1) (L)—strike out the entire section. (This eliminates the section pertaining to fee splitting.)

This portion of the report of the Council was referred to the Reference Committee on Miscellaneous Affairs.

Dr. Summers: The following portion of the report deals with Vendor legislation.

"Vendor" Legislation

Delegates will recall that there has been much discussion over the past two years about the so-called "vendor" program—Public Law 880. In last year's session of the House, a resolution was adopted which stated:

> "*Resolved*, That physicians not be paid for their services under the vendor act, and be it further resolved, that any vendor legislation should make provision for the appointment of a medical advisory committee to consult with and advise the Missouri Division of Welfare on all matters affecting any phase of medical care connected with the program."

Vendor legislation was introduced in the Missouri Legislature early this year as House Bill No. 1 and Senate Bill 13. These provide generally for hospital or nursing home bed-patient care for public assistance recipients.

The bill passed the House almost immediately, under a rule that permitted no amendments. It has been sent to the Senate and referred to the Committee on Public Health there.

These bills do exclude physicians from receiving compensation under the program. They also provide for advisory committees at the option of the Director of the Division of Welfare.

Efforts are being made to have the legislation amended to fit the House of Delegates' resolution so that a medical advisory committee will be required, rather than being optional.

The Speaker referred this portion of the report of the Council to the Reference Committee on Reports of Officers.

Dr. Summers: One further item deals with alcoholism.

Alcoholism

Some years ago a special committee was set up to study the complex problem of alcoholism in Missouri.

The Council wishes to pay tribute to the long and hard work of that committee and to the monumental report which it developed—"Alcoholism in Missouri." It wishes to recognize the members—Dr. Joseph B. Kendis, Dr. George W. Forman, the late Dr. S. D. Smith—and especially the chairman, Dr. Ralph E. Duncan—for their service to the medical profession and the public of the state.

Achievement of the objectives of the Association in legislative areas necessitates, of course, correlation of our activities. Since the work of the Committee on Alcoholism has culminated in its recommendations for a program of treatment, research and education on the state government level, the Council felt that the efforts of MSMA in regard to the problem of alcoholism now require close coordination with the other programs of the Association.

Consequently, the Council has accepted the responsibilities in this area, and the Committee on Alcoholism has been dissolved with the deep appreciation of the Association for its work.

The Speaker referred this portion of the report of the Council to the Reference Committee on Reports of Officers.

The report of the Special Committee to study the Councilor District Set-up and the Representation of Members in the House of Delegates, W. S. Sewell, M.D., Springfield, Chairman, follows:

REPORT OF THE SPECIAL COMMITTEE TO STUDY OF THE COUNCILOR DISTRICT SET-UP AND THE REPRESENTATION OF MEMBERS IN THE HOUSE OF DELEGATES

This special committee of 10, appointed by President W. F. Francka, is made up of representatives from the 10 councilor districts of the Association. The committee was appointed in compliance with action of the House of Delegates at the 1958 Annual Session.

The action of the House followed receipt of a number of requests on the part of component societies for adjustments in the set-up of councilor districts and for a change in the basis for representation in the House of Delegates. These requests, the related recommendation of the Council and a number of resolutions considered by last year's House of Delegates, together with the action of the House, are set out below:

Reference committees held open meetings.

FRANKLIN-GASCONADE-WARREN REQUEST

The following request was made by the Franklin-Gasconade-Warren County Medical Society to be transferred from the 4th to the 5th councilor district:

WHEREAS, The Franklin-Gasconade-Warren County Medical Society has passed a resolution by unanimous vote to submit this petition to the Missouri State Medical Association, and

WHEREAS, This action was taken because of the greater interest in the activities and professional programs of a postgraduate nature being offered by the University of Missouri Medical School, and

WHEREAS, Two of the counties concerned were formerly a part of the fifth and were transferred to the fourth councilor district at the time of hyphenation of the society, and

WHEREAS, There is no opposition or known reason to prevent this action,

Therefore, The Franklin-Gasconade-Warren County Medical Society respectfully presents this petition to the Council and the House of Delegates of the Missouri State Medical Association for approval and transfer of the said society from the fourth to the fifth councilor district of the Association.

BARTON-DADE REQUEST

The following request was received from the Barton-Dade Medical Society:

"The six active members of the Barton-Dade County Medical Association who are located in Barton County request permission to transfer from the 8th councilor district to the 6th councilor district. We make this request in order that we might hyphenate with the West Central Medical Society. We feel that we could take a more active part in medical meetings if we could belong to the West Central Medical Society. Our type of medical practice is more closely allied with the members of that society."

COUNCIL RESOLUTION

The following resolution was presented to the House by the Council:

Resolved, That the president of the Association appoint a committee of 10 made up of a representative of each of the councilor districts to study the adequacy of the present district set-up and make a report and recommendations to the 1959 session of the House of Delegates.

ST. LOUIS COUNTY RESOLUTION

The following resolution was presented to the House of Delegates by Dr. Paul R. Whitener, St. Louis:

WHEREAS, The St. Louis County Medical Society has grown to become the third largest society in the Missouri State Medical Association during the past 20 years, and

WHEREAS, The membership of the St. Louis County Medical Society is now greater than that of any of the societies comprising the 4th councilor district, and

WHEREAS, The almost 400 members of the St. Louis County Medical Society feel a greater need for representation of their organization in the Council of the Missouri State Medical Association, therefore, be it

Resolved, That St. Louis County be formed into a new and separate councilor district of the Missouri State Medical Association, and that the new councilor district be represented by its own councilor in the Council of the Missouri State Medical Association.

ST. LOUIS MEDICAL SOCIETY RESOLUTION

The following resolution as presented to the House by Dr. Robert P. Bassett, St. Louis:

WHEREAS, Over the past several years, a situation has developed wherein true proportional representation in the House of Delegates of the Missouri State Medical Association has ceased to exist, and

WHEREAS, At the present time 2,500 members in the metropolitan areas are represented by 51 delegates and three councilors while 1,100 members in the remaining parts of the state are represented by 99 delegates and 7 councilors, and

WHEREAS, Both representative segments of an organization, i.e., the House of Delegates and the Council, should not be elected on a geographical basis, be it therefore

Resolved, That a committee be appointed to study the problem and instructed to report its findings and recommendations to the House of Delegates at its 1959 meeting.

REFERENCE COMMITTEE REPORT

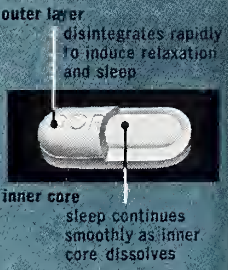
This report was made by the Reference Committee on Constitution and By-laws, and the discussion and action of the House are also set out below:

"Dr. Barger: Item 3 refers to a resolution by the St. Louis County Medical Society asking that it be made a separate councilor district, and Item 4 refers to a resolution by the St. Louis City Society requesting that a committee be appointed to study the problems of the present councilor districts as these pertain to present distribution and representation. It is the opinion of the committee that the purpose of these two resolutions can be accomplished by the adoption of the published supplemental report of the Council as it pertains to councilor districts and we, therefore, recommend the adoption of this supplemental published report. There is a minority report from the committee on this matter.

"Sam J. Merenda, M.D., St. Louis: When the St. Louis County Medical Society introduced the resolution, they had a particular problem in mind, that they

For those patients who complai

carries your patients through the middle of the night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inner core
sleep continues smoothly as inner core dissolves

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Warning: May be habit forming

Mephenesin 425
*Dorsey brand of pentobarbita

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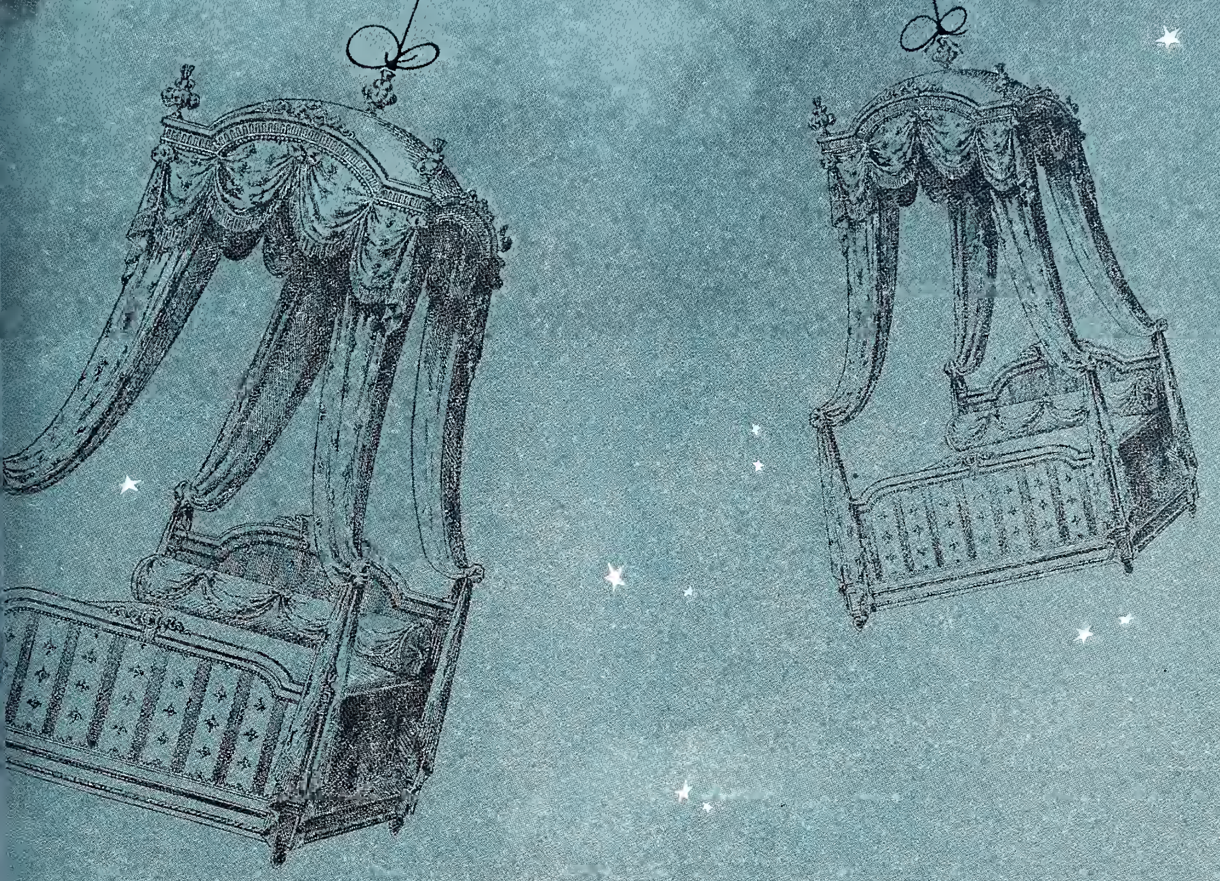

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1 Schlesinger, E. B.: Tr. New York Acad. Sc. 2:5, (Nov.) 1948.
2 Richards, R. K., and Taylor, J. D.: Anesthesiology 17:414, 1956.
3 Shideman, F. E.: Postgrad. Med. 24:207, 1958.
4 Berger, F.: Pharmacol. Rev. 1:243, 1949.

ITH-DORSEY · a division of The Wander Company · Lincoln, Nebraska · Peterborough, Canada felt they were big enough that they should be a separate councilor district. I think that everyone on the reference committee was in agreement with it, but the only disagreement was, did the report of the majority specifically state that this appointment of a committee of 10 would direct to the delegates next year that St. Louis County have a specific councilor district. For that reason, I would like in introduce this amendment:

The Woman's Auxiliary buffet dinner drew a good crowd.

Resolved, That the majority report be amended to add this paragraph: That the appointed committee of 10 be directed to specify in their recommendations to the 1959 session of the House of Delegates that St. Louis County be made a separate councilor district with its own councilor. The motion was seconded.

"On vote the amendment was defeated.

"Following second on the motion to adopt the majority report, it was discussed by Drs. Paul R. Whitener, Merenda, Barger, John A. Growdon, David N. Kerr.

"Dr. Kerr, St. Louis, offered the following amendment to the majority report: That the said committee, if appointed, be aware that redistribution of delegates to the MSMA Annual Session may involve more than redistricting the state and should be so regarded.

"On second, the amendment was adopted.

"On vote, this portion of the majority report, as amended, was adopted."

COMMITTEE MEETING OF SEPTEMBER 7, 1958

The first meeting of this special committee was held in St. Louis, September 7. At this meeting, Mr. O'Brien outlined the history of the present councilor district set-up, as follows:

At the 1937 Annual Session of the House of Delegates, Dr. Herbert L. Mantz, Kansas City, moved that the State of Missouri be divided into 10 councilor districts.

The reasons listed by Dr. Mantz for 10 councilor districts are: (1) Efficiency, a small Council is more easily assembled and at less cost. (2) A small Council will not have strength to overbalance the House of Delegates and therefore not represent the true sentiment of the Association. (3) Means of transportation are vastly different from the horse and buggy days and a councilor may now have a much larger district and still do efficient work. (4) For some districts the membership is so small that we have practically a "rotten borough system," e.g., one district has only 10 members compared to district 30 with 156 or district 20 with 1,040. (5) Progressive states have few councilor districts: Pennsylvania, 11; Minnesota, 9; Kansas, 12; Illinois, 13; Wisconsin, 13 and New York, 8. (6) Finally, the American Medical Association recommends that states with many councilor districts reduce them to a few.

As a result of this motion the present councilor district set-up was established.

The committee then reviewed the patterns of organization of the A.M.A. and of representative state associations. General discussion followed, and it was the sense of the group that members of the committee would seek to sound out the views of doctors in their individual councilor districts.

It was voted that the special committee would make its report directly to the 1959 House of Delegates after presenting it to the Council solely as a matter of information.

COMMITTEE MEETING OF NOVEMBER 16, 1958

At this meeting, each member of the committee reported informally on the views of members of component societies in individual councilor districts.

A series of motions were made and adopted which had the effect of deciding that the committee would continue its study of a variety of possible recommendations.

Figures were presented by Dr. Sexton to show the ratio of members to delegates in the various component societies as well as the pattern of attendance by delegates from metropolitan and rural areas at annual meetings of the House, particularly the Wednesday session.

COMMITTEE MEETING OF JANUARY 25, 1959

The committee decided to consider separately the two questions of councilor district set-up and the basis for representation in the House.

Councilor District Set-Up

The matter of councilor districts was considered first. (It was brought out that the request of the Barton-Dade Society to be moved to the sixth councilor district had been withdrawn and was no longer one of the specific questions before the committee.)

Motion

After extended discussion, Dr. Magness moved that St. Louis County become a separate councilor district and that other societies in the present fourth district be constituted a district by themselves.

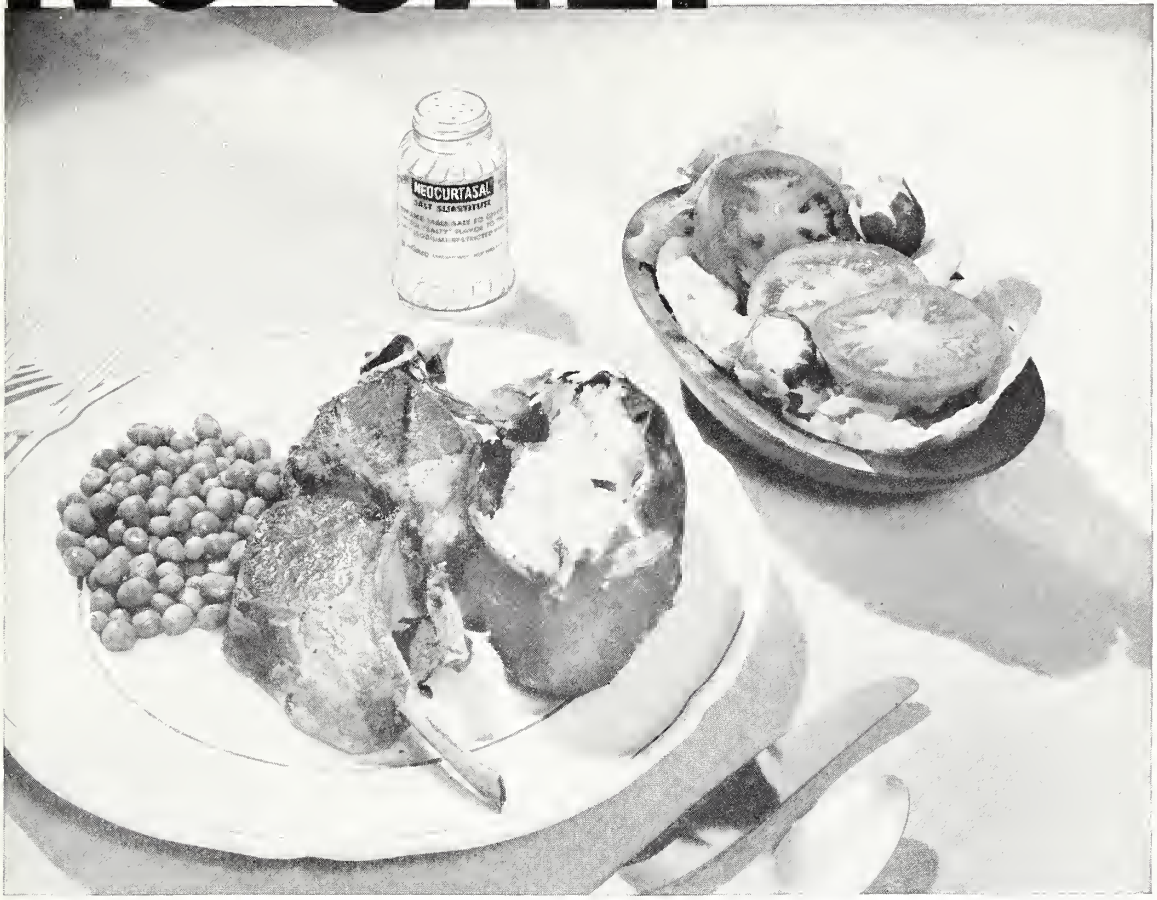
An amendment to this motion was offered by Dr. Sexton to permit the societies in the fourth district, other than St. Louis County, either to form a separate district or to be absorbed in other adjacent districts. The amendment was adopted.

On vote, however, the motion failed.

It appeared from the discussion that the majority of the committee was opposed to any enlargement of the Council at the present time. Reasons of efficiency and expense were cited for this view. Reluctance was also expressed to take a step that might be the start of a chain of adjustments.

Two main points were made by Dr. Magness in support of his motion: (1) The 400-physician membership of the St. Louis County society warrants recognition by a place on the Council; and (2) The present fourth district is potentially dominated by the disproportionately large membership of the St. Louis County society, and this is not a desirable situation.

NO SALT *..but seasoned*



A meal of even the most colorful and the most meticulously prepared food can be dreary eating without salt. Neocurtasal, for the patient on a low-sodium diet, brings back flavor to foods—makes eating a pleasure once more.

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Contains potassium chloride, potassium glutamate, glutamic acid, calcium silicate, potassium iodide (0.01%).

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Assures patient's cooperation

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Representation in House of Delegates

There followed extensive discussion of membership representation in the House of Delegates. Two basic views were expressed.

The first, put forward by Dr. Sexton, was that the present makeup of the House gives too great a voice to outstate delegates. He cited figures to show that hyphenated outside societies have at present a total of 78 delegates for 510 members, or a ratio of 1 delegate for each 6.5 members. He suggested a change whereby individual counties would no longer be entitled to a delegate apiece if they were part of a hyphenated society, but would elect delegates on the basis of the membership of the hyphenated society as a whole. After discussion, this suggestion was dropped, and Dr. Sexton expressed his view in the following motion:

Guest speakers appeared on a panel.

Motion

That, in the interest of the membership at large, it be recommended to the House of Delegates that the bylaws of the Missouri State Medical Association be changed so that there be one delegate from each component society (including individual county societies merged in hyphenations) for each 25 members of such society or fraction thereof.

Dr. Sexton explained his view that this change from the present basis of one delegate for each 50 members or more would give more equitable representation to members of larger city societies, but still would leave a dominant role to delegates elected from outstate.

The motion was seconded, but defeated.

Those voting against the motion held the second basic view that was expressed repeatedly throughout this part of the meeting's discussion.

The elements of this view were the expressed unwillingness of outstate members to change the present balance in the House of Delegates; the general agreement that the affairs of the association were proceeding in a satisfactory manner, and that this was not the time for a basic change; and, finally, that the time was particularly unpropitious in view of sharp differences between the delegation of one metropolitan society and the House at large that have been apparent in recent sessions.

Indicating that the change advocated in his defeated motion would be presented directly to the House at its next session, Dr. Sexton moved that copies of the tabulations of figures on representation prepared by him for the consideration of this special committee be appended to the committee's report to the House. The motion was adopted.

Motion

A motion was made by Dr. Magness to express a consensus of the committee that—inasmuch as it could not come to any unanimous decision, and that a majority recommended no change either in councilor district boundaries or in the basis for representation in the House—that the majority recommendation against any change at this time be presented to the House at its next session with the expression of the committee's feeling that the problem is of sufficient potential magnitude to warrant further study at a later time.

The motion was adopted.

The committee adjourned after an expression by the chairman thanking each member for his work and interest and taking note of the sincerity of purpose and good feeling that had characterized all the deliberations of the group.

Dr. Wimp presented a resolution on the floor of the House.

Exhibit A

			Attending		
County Society	*Dels.*	*Mbs.*	*1956*	*1957*	*1958*
Barton-Dade	2	10	0	0	0
Butler-Ripley-Wayne	3	31	0	0	0
Carter-Shannon	2	1	1	0	0
Chariton-Macon-Monroe-Randolph	4	30	2	2	2
Dallas-Hickory-Polk	3	7	0	0	1
Franklin-Gasconade-Warren	3	24	3	3	3
Grand River (Caldwell-Carroll-Harrison-Livingston-Grundy-Linn-Davies-Mercer-DeKalb)	9	54	6	7	5
Lafayette-Ray	2	27	1	1	1
Lewis-Clark-Scotland	3	4	1	0	0
Lincoln-St. Charles	2	24	1	2	2
Marion-Ralls-Shelby	3	30	1	1	0
Mid-Missouri (Phelps-Crawford-Dent-Pulaski-Maries-Laclede)	6	42	4	1	1
Mineral Area (St. Francois-Iron-Madison-Washington-Reynolds-Ste. Genevieve)	6	30	1	2	2
Nodaway-Atchison-Gentry-Worth	4	18	2	2	2
North Central (Adair-Schuyler-Knox-Sullivan-Putnam)	5	18	0	1	1
Ozarks (Barry-Lawrence-Christian-Stone-Taney-Newton-McDonald)	6	53	4	3	4
SEMO (Stoddard-New Madrid-Scott-Mississippi)	4	41	0	2	1
South Central (Howell-Oregon-Texas-Wright-Douglas-Ozark)	6	24	2	3	2
West Central (Bates-Cass-Cedar-St. Clair-Vernon)	5	42	3	4	4
	78	510			

Present ratio is 1:6.5; changed would be 1:24

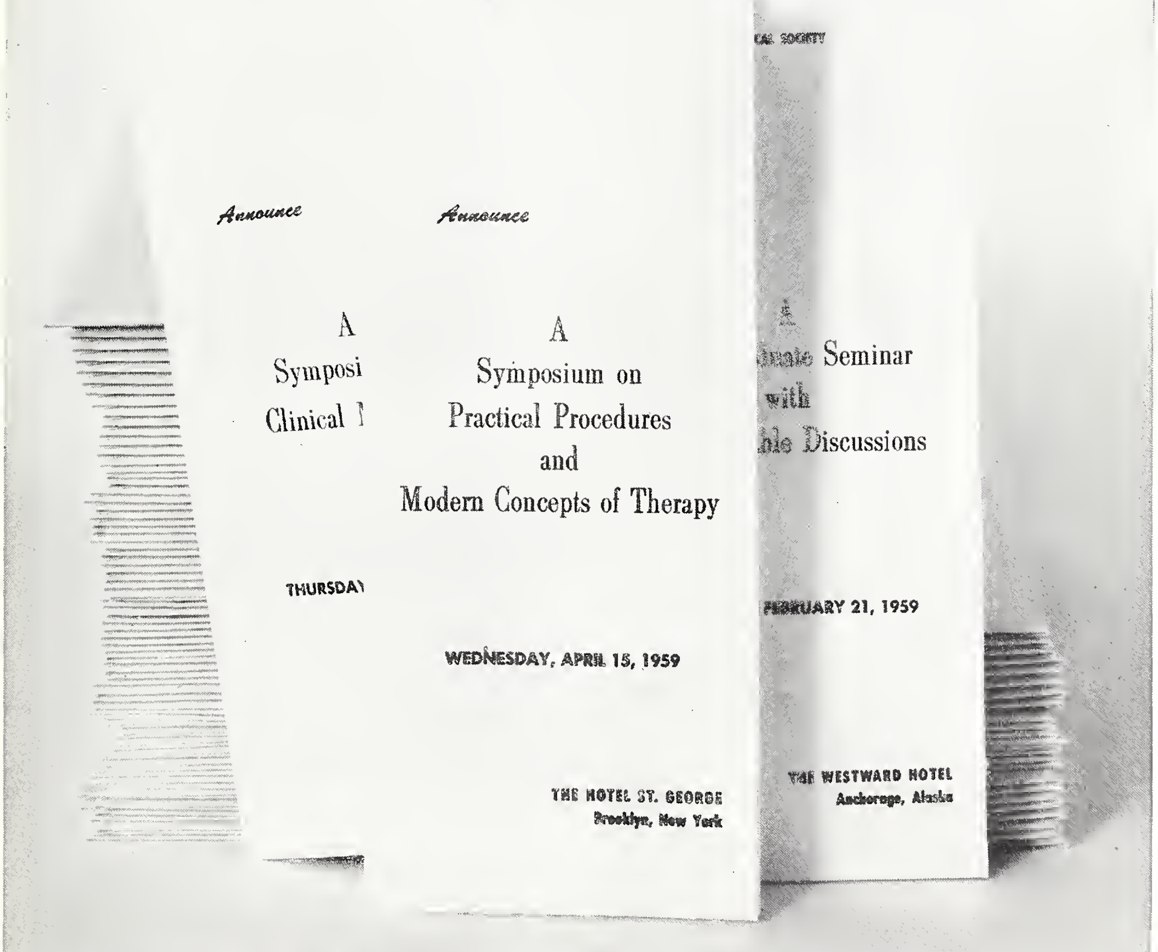
If it were changed to one delgate for each 50 members or fraction thereof, the number of delegates from hyphenated societies would be 21 in place of the present 78.

all physicians are invited to attend...

In recognition of the responsibility of the pharmaceutical industry to aid postgraduate medical education, Lederle originated its Symposium Program eight years ago. Initiated with a meeting sponsored by the Knoxville Academy of Medicine and continued with other medical organizations, the program presents up-to-date information of clinical significance to physicians throughout the United States and Canada. Through Symposia, over 50,000 physicians have had the opportunity to hear and question specialists in every field and, with their wives, participate in the activities of a Symposium day.

You and your wife may wish to attend one of the Symposia below.

JEKYLL ISLAND, GEORGIA—Thursday, August 27, 1959
The Jekyll Club
BATON ROUGE, LOUISIANA—Friday, Sept. 18, 1959
The Capitol House Hotel
BEAUMONT, TEXAS—Saturday, September 19, 1959
The Hotel Beaumont
KANSAS CITY, KANSAS—Friday, September 25, 1959
Battenfeld Memorial Auditorium
INDIANAPOLIS, INDIANA—Wednesday, Sept. 30, 1959
The Sheraton-Lincoln Hotel
OKLAHOMA CITY, OKLAHOMA—Friday, October 2, 1959
The Skirvin Hotel
BIRMINGHAM, ALABAMA—Sunday, October 11, 1959
The Dinkler-Tutwiler Hotel
TACOMA, WASHINGTON—Wednesday, October 14, 1959
The Hotel Winthrop
TRAVERSE CITY, MICHIGAN—Friday, October 23, 1959
The Park Place Hotel
LUBBOCK, TEXAS—Saturday, October 31, 1959
The Lubbock Country Club
ST. CHARLES, ILLINOIS—Wednesday, November 4, 1959
The St. Charles Country Club
DALLAS, TEXAS—Friday, November 6, 1959
The Hilton Hotel
WICHITA, KANSAS—Saturday, November 7, 1959
The Hotel Broadview
SCHENECTADY, NEW YORK—Thursday, November 12, 1959
The Mohawk Golf Club
CORPUS CHRISTI, TEXAS—Friday, November 13, 1959
The Robert Driscoll Hotel
RIVERSIDE, CALIFORNIA—Sunday, November 15, 1959
The Mission Inn
SANTA BARBARA, CALIFORNIA—Wednesday, Nov. 18, 1959
The Santa Barbara Biltmore
MOLINE, ILLINOIS—Wednesday, December 2, 1959
The LeClaire Hotel



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A
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Clinical
THURSDA

Announce
A
Symposium on
Practical Procedures
and
Modern Concepts of Therapy
WEDNESDAY, APRIL 15, 1959
THE HOTEL ST. GEORGE
Brooklyn, New York

CAL SOCIETY
Seminar
with
Discussions
FEBRUARY 21, 1959
THE WESTWARD HOTEL
Anchorage, Alaska

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Exhibit B

	No. of Dels.		Ind.*	Hyphenated Socs.			St. L.		St. L. Co.		Jackson	
Year	*Sun.*	*Wed.*	*Socs.*	*Socs.*	*Cos.*	*Dels.*	*Sun.*	*Wed.*	*Sun.*	*Wed.*	*Sun.*	*Wed.*
1958	95	80	23	12	51	26	25	20	8	8	13	11
1957	97	65	21	13	45	32	25	16	6	5	13	10
1956	87	21	21	11	52	23	25	18	6	6	10	12

* Exclusive of St. Louis Medical Soc., St. Louis County and Jackson.

Attendance by Districts

District	*1958*	*1957*	*1956*
1	11	13	9
2	4	5	4
3	25	25	25
4	13	12	11
5	8	9	9
6	7	9	7
7	13	13	12
8	9	8	10
9	7	5	5
10	100*	103*	99

* Variance from Sunday figure because a few attend the Wednesday meeting who do not attend the Sunday meeting.

The Speaker referred this report to the Reference Committee on Amendments to the Constitution and By-laws.

W. F. Francka, M.D., Hannibal, President, announced the Committee on Nominations as follows:

Committee on Nominations

John H. Platz, M.D., Carrollton.
R. J. Lanning, M.D., Hannibal.
R. B. Bassett, M.D., St. Louis.
Robert Kingsland, M.D., Clayton.
W. A. Bloom, M.D., Fayette.
A. L. Lowe, M.D., Sedalia.
Hector W. Benoit, M.D., Kansas City.
John P. Ferguson, M.D., Springfield, Chairman.
H. W. Carrington, M.D., Lebanon.
W. O. Finney, M.D., Chaffee.

James C. Cope, M.D., Columbia: Mr. Speaker, I would like to present the following resolution:

Whereas, The courts of the State of Missouri have ruled that osteopathic physicians, as a group, cannot be denied staff privileges in certain hospitals, and,

Whereas, These hospitals have no choice but to admit osteopathic physicians to their staffs, and,

Whereas, The June, 1955 report of the Judicial Council of the American Medical Association to the A.M.A. House of Delegates stated involuntary association of physicians with osteopaths, where required by law or regulation of the state, is not unethical.

Whereas, This necessity in no way alters the quality of medical care provided except as outlined below, and,

Whereas, The joint commission on hospital accreditation refuses to inspect these hospitals, and,

Whereas, The failure to receive accreditation will work a hardship on the hospital administration, and,

Whereas, The failure of accreditation prevents the hospital from operating any approved training programs for nurses, technicians, interns and residents, and,

Whereas, These factors result in lowering of the quality of patient care, be it therefore

Resolved, That the Missouri State Medical Association request the joint commission on Hospital Accreditation to set aside the ruling in the case of hospitals which are required by law to admit osteopathic physicians to their staffs, and, be it further

Resolved, That the Joint Commission be asked to inspect these hospitals upon request and without prejudice for Accreditation as soon as practical, and, be it further

Resolved, That the Missouri Delegates present this resolution to the House of Delegates of the American Medical Association for its consideration.

The Speaker referred this resolution to the Reference Committee on Resolutions.

John F. Bowser, M.D., Kansas City: I would like to present a resolution dealing with medical services for the low income aged as follows:

Whereas, The medical profession of the State of Missouri has provided medical care to the needy citizens of Missouri for over a century and

Whereas, The physicians have participated in and developed programs to aid the low-income citizens of Missouri, through encouraging and supporting prepayment programs for obtaining adequate medical care for them on a non-charitable basis, and

Whereas, The House of Delegates of the American Medical Association has, by resolution, urged all physicians to provide medical care to low-income aged persons for fees that are commensurate with the patient's economic circumstances, therefore, be it

Resolved, By the House of Delegates of the Missouri State Medical Association, that all members of this Association are urged to express in their daily practice the intent and purpose of the resolution of the American Medical Association; and, be it further resolved that the members of this association recommend, encourage and influence the further development of programs for medical care of low income citizens.

The Speaker referred this resolution to the Reference Committee on Amendments to the Constitution and By-laws.

J. J. Wimp, M.D., Kirksville: I wish to present the following resolution:

At a special meeting of the North Central Counties Medical Society held in Kirksville, Missouri, March 31, 1959, the following resolution was unanimously adopted:

Whereas, The medical care of rural communities, small towns and cities must in part be performed in small hospitals which may be privately or publicy owned and managed, and

Whereas, These small hospitals perform a necessary and useful service to their communities, and

Whereas, The continued existence of some of these hospitals is jeopardized because the State Division of Health threatens to refuse them a license through their inability to carry out some changes in their buildings, equipment, or professional services, and

Whereas, Such small hospitals should not be required to comply with the same standards set up for large hospitals and medical centers, and

Whereas, Some of the changes demanded are of controversial or doubtful merit, be it hereby

Resolved, That this matter be brought to the attention of the House of Delegates of the Missouri State Medical Association, and that it be urged through appropriate study and consultation with the State Division of Health to secure the right of deserving small hospitals to continue their existence and service to their communities.

The Speaker referred this resolution to the Reference Committee on Resolutions.

Louis H. Kohler, M.D., St. Louis: I present the following resolution pertaining to mental health:

Whereas, The Missouri State Medical Association has been vitally interested in improving the Mental Health Program of the Missouri Division of Mental Diseases; and

Whereas, The passage of legislation in 1957 has resulted in the formation of a new mental health commission, and the commission has obtained the services of a highly qualified psychiatrist to direct the new mental health program in our state; and

Whereas, The new Director, Addison M. Duval, M.D., a member of this Association, together with the Missouri Mental Health Commission has recommended a central office budget of $391,301 for the next biennium, which amount was included in Section 5.100 of House Bill 63; and

Whereas, The appropriation was drastically reduced by

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References: 1. Charles, C. M.: Geriatrics *2*:110 (March) 1956. 2. Menger, H. C.: Clin. Med. *4*:313 (March) 1957. 3. Shuster, B. H.: M. Clin. North America *40*:1787 (Nov.) 1956.

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action of the House of Representatives in the finally passed bill, known as House Committee Substitute for H.B. 63; now, therefore be it

Resolved, That the Missouri State Medical Association, assembled in its Annual Session, hereby urgently requests the Missouri General Assembly to appropriate the full amount of $391,301 for the central office of the Missouri Division of Mental Diseases, in order that the staff may proceed with plans for improving the State mental health program without delay; and be it further

Resolved, That copies of the Resolution be furnished to the Governor of Missouri, the President pro tem of the Senate, the majority and minority floor leaders of the Senate, the Speaker of the House, the majority and minority floor leaders of the House, and the Chairman of the Senate and House Committee on Appropriations.

The Speaker referred this resolution to the Reference Committee on Resolutions.

JAMES A. JARVIS, M.D., Kansas City: I wish to present the following resolution dealing with an interprofessional code for physicians and attorneys:

WHEREAS, The practice of medicine and law are becoming more inter-related and physicians and attorneys will be drawn into steadily increasing association, and

WHEREAS, Both professions are guided by ethics established in the public's interest to promote the public welfare which is best served when there is understanding and cooperation between all concerned, and

WHEREAS, The House of Delegates of the American Medical Association in June 1958 and the House of Delegates of the American Bar Association in August 1958 adopted the National Interprofessional Code for Physicians and Attorneys; now, therefore, be it

Resolved, By the House of Delegates of Missouri State Medical Association that the National Interprofessional Code for Physicians and Attorneys as adopted, as stated above, in the copy of which is attached, hereto, and made a part of this resolution, be and is hereby adopted by the Missouri State Medical Association; and be it further

Resolved, That the President and Secretary of the Missouri Bar, Integrated be delivered a copy of this resolution; and be it further

Resolved, That the Interprofessional Code for Physicians and Attorneys be published in MISSOURI MEDICINE and copies of the Code mailed to each member of the Association.

NATIONAL INTERPROFESSIONAL CODE FOR PHYSICIANS AND ATTORNEYS

Preamble

The provisions of this Code are intended as guides for physicians and attorneys in their inter-related practice in the areas covered by its provisions. They are not laws, but suggested rules of conduct for members of the two professions, subject to the principles of medical and legal ethics and the rules of law prescribed for their individual conduct.

This Code constitutes the recognition that, with the growing inter-relationship of medicine and law, it is inevitable that physicians and attorneys will be drawn into steadily increasing association. It will serve its purpose if it promotes the public welfare, improves the practical working relationships of the two professions, and facilitates the administration of justice.

Medical Reports

The physicians upon proper authorization should promptly furnish the attorney with a complete medical report, and should realize that delays in providing medical information may prejudice the opportunity of the patient either to settle his claim or suit, delay the trial of a case, or cause additional expense or the loss of important testimony.

The attorney should give the physician reasonable notice of the need for a report and clearly specify the medical information which he seeks.

Conferences

It is the duty of each profession to present fairly and adequately the medical information involved in legal controversies. To that end the practice of discussion in advance of the trial between the physician and the attorney is encouraged and recommended. Such discussion should be had in all instances unless it is mutually agreed that it is unnecessary.

Conferences should be held at a time and place mutually convenient to the parties. The attorney and the physician should fully disclose and discuss the medical information involved in the controversy.

Subpoena for Medical Witness

Because of conditions in a particular case or jurisdiction or because of the necessity for protecting himself or his client, the attorney is sometimes required to subpoena the physician as a witness. Although the physician should not take offense at being subpoenaed the attorney should not cause the subpoena to be issued without prior notification to the physician. The duty of the physician is the same as that of any other person to respond to judicial process.

Arrangements for Court Appearances

While it is recognized that the conduct of the business of the courts cannot depend upon the convenience of litigants, lawyers or witnesses, arrangements can and should be made for the attendance of the physician as a witness which take into consideration the professional demands upon his time. Such arrangements contemplate reasonable notice to the physician of the intention to call him as a witness and to advise him by telephone, after the trial has commenced, of the approximate time of his required attendance. The attorney should make every effort to conserve the time of the physician.

Instruction courses ran concurrently.

Physician Called as Witness

The attorney and the physician should treat one another with dignity and respect in the courtroom. The physician should testify solely as to the medical facts in the case and should frankly state his medical opinion. He should never be an advocate and should realize that his testimony is intended to enlighten rather than to impress or prejudice the court or the jury.

It is improper for the attorney to abuse a medical witness or to seek to influence his medical opinion. Established rules of evidence afford ample opportunity to test the qualifications, competence and credibility of a medical witness; and it is always improper and unnecessary for the attorney to embarrass or harass the physician.

Fees for Services of Physician Relative to Litigation

The physician is entitled to reasonable compensation for time spent in conferences, preparation of medical reports, and for court or other appearances. These are proper and necessary items of expense in litigation involving medical questions. The amount of the physician's fee should never be contingent upon the outcome of the case or the amount of damages awarded.

Payment of Medical Fees

The attorney should do everything possible to assure payment for services rendered by the physician for himself or his client. When the physician has not been fully paid the attorney should request permission of the patient to pay the physician from any recovery which the attorney may receive in behalf of the patient.

Implementation of This Code at State and Local Levels

In the event similar action has not already been taken this Code should, in the public interest, be appropriately implemented at state and local levels for the purpose of improving the inter-professional relationship between the legal and medical professions.

Consideration and Disposition of Complaints

The public airing of any complaint or criticism by a member of one profession against the other profession or any of its members is to be deplored. Such complaints or criticism, including complaints of the violation of the principles of this Code, should be referred by the complaining doctor

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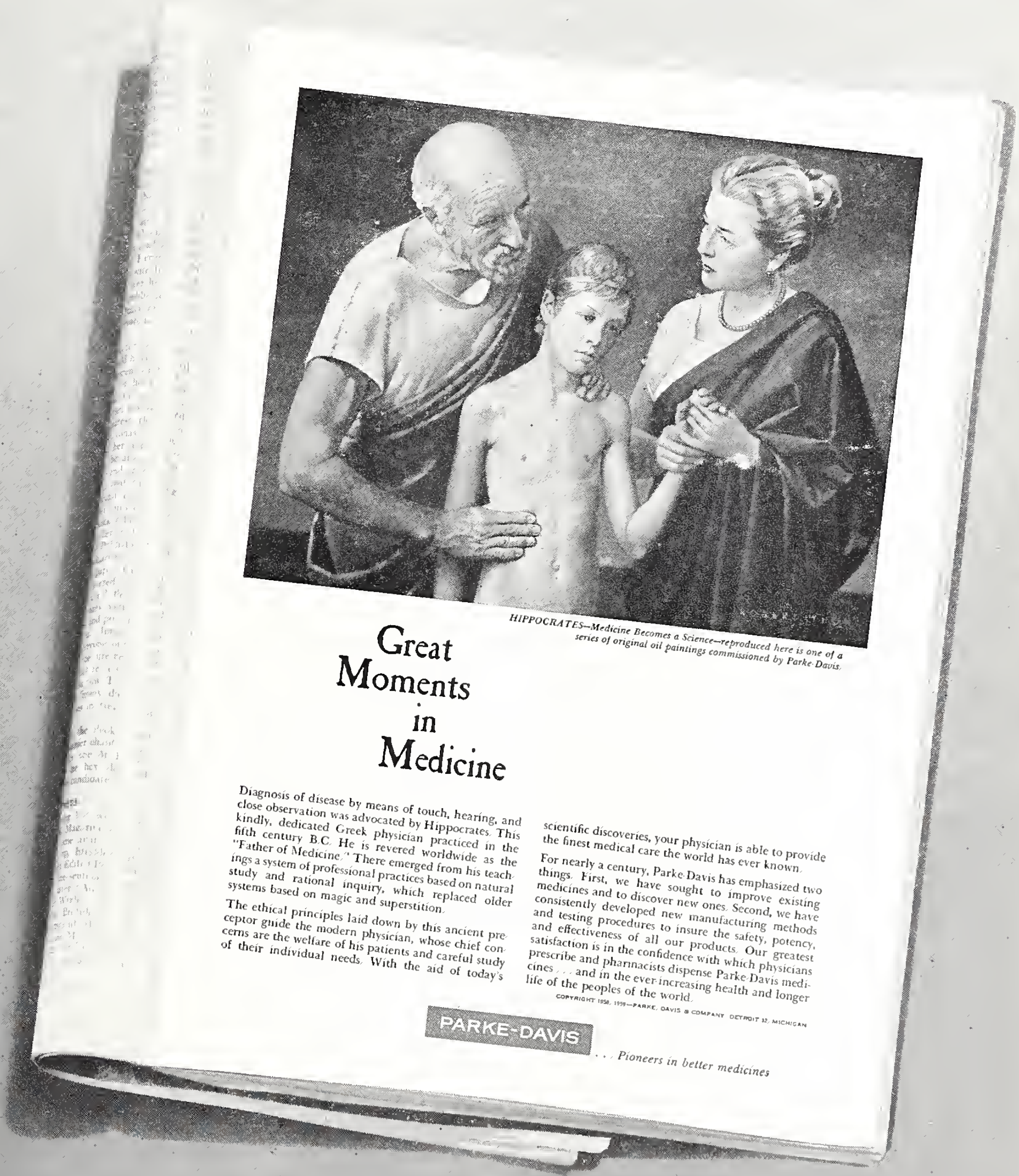

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or lawyer through his own association to the appropriate association of the other profession; and all such complaints or criticism should be promptly and adequately processed by the association receiving them.

The Speaker referred this resolution to the Reference Committee on Reports of Officers.

The Speaker declared the session adjourned at 3:00 p.m.

Monday, April 6, 1959

The House of Delegates convened at 4:30 p.m. in the Colonial Ball Room, Hotel Muehlebach, Kansas City, with Oscar P. Hampton, M.D., University City, Speaker, presiding.

Officers were seated at the speaker's table at the banquet.

Kenneth E. Knabb, M.D., Springfield, reported for the Credentials Committee.

Kenneth C. Hollweg, M.D., Kansas City, reported briefly for the General Committee on Arrangements.

W. W. Gist, M.D., Kansas City, reported for the Reference Committee on Amendments to the Constitution and By-Laws.

REPORT OF THE REFERENCE COMMITTEE ON AMENDMENTS TO THE CONSTITUTION AND BY-LAWS

Mr. Speaker: This is a report of the meeting of the Reference Committee on Amendments to the Constitution and By-Laws which met at 5:00 p.m., April 5, 1959. The following members were present: Drs. W. W. Gist, Chairman; James C. Cope, Glenn J. Tygett, Louis Kohler and John R. Dixon.

Three items were presented to the Committee for study. A resolution concerning Medical Services for the Low-Income Aged was discussed by the Committee members and interested physicians. It was felt that this resolution required more study and final action will be presented at the next session.

Mr. Speaker: I move the adoption of this portion of the report.

On second, this portion of the report was adopted.

The second item was a report of the Committee on Hospital and Professional Relations dealing with five main points: 1. Community Program for Older Persons in Greene County, Missouri; 2. Jefferson County Multiphasic Screening Survey; 3. Public Health Nursing Program; 4. Nursing Home Program and 5. White House Conference on Aging and a report on Staph Infections in Hospitals. The following resolution, as a consequence of this Committee Report, reads as follows:

Whereas, Questions concerning the health care of the older age groups are assuming major importance, and

Whereas, The Missouri State Medical Association has traditionally accepted the responsibility to provide leadership in all areas of health care, therefore, be it

Resolved, That the By-Laws of the Missouri State Medical Association be amended to provide for a standing Committee on Aging as follows:

Amend Chapter 7, Section 2 (page 7), by adding, immediately following

"A Committee on Physical Medicine and Rehabilitation," the following:

"A Committee on Aging,"

and further amending Chapter 7, Section 2 (page 8), by adding immediately before Section 3, the following:

The Committee on Aging shall consider matters concerned with the problem of our aging population in relation to health care.

Mr. Speaker: I move the adoption of this portion of the report.

On second, this portion of the report was adopted.

Reference committees met following the House of Delegates.

The third item is the Report of the Special Committee to Study the Councilor District Set-up and the Representation of Members in the House of Delegates. This report was discussed by the Committee and the motion made by Dr. Magness, which reads as follows: "Inasmuch as the Committee could not come to any unanimous decision, and that a majority recommended no change either in councilor district boundaries or in the basis for representation in the House—that the majority recommendation against any change at this time to be presented to the House at its next session with the expression of the committee's feeling that the problem is of sufficient potential magnitude to warrant further study at a later time."

It is this Committee's feeling and the consensus of opinion of the interested members present at the hearing that a new committee be formed to further study the basis for a change in representation in the House of Delegates and an adjustment in the set-up of councilor districts.

Mr. Speaker: I move that this portion of the report be adopted.

On second, this portion of the report was adopted.

Mr. Speaker: I move that the report as a whole be adopted.

On second, the report as a whole was adopted.

W. D. English, M.D., Cardwell, reported for the Reference Committee on Resolutions.

"It is concluded that the addition of buffering agents to acetylsalicylic acid in the concentrations used serves no clinically detectable useful purpose."[1]

[1] Sadove, Max S. and Schwartz, Lester: An Evaluation of Buffered Versus Nonbuffered Acetylsalicylic Acid, Postgraduate Medicine; 24:183, August, 1958.

Nonbuffered Material Used—Bayer® Aspirin.

REPORT OF THE REFERENCE COMMITTEE ON RESOLUTIONS

We have four items, the first concerning the Boone County Medical Society. We recommend approval of the resolution as follows:

Whereas, The Courts of the State of Missouri have ruled that osteopathic physicians, as a group, cannot be denied staff privileges in certain hospitals, and,
Whereas, These hospitals have no choice but to admit osteopathic physicians to their staff, and,
Whereas, The June, 1955 report of the Judicial Council of the American Medical Association to the A.M.A. House of Delegates stated involuntary association of physicians with osteopaths, where required by law or regulation of the state, is not unethical,
Whereas, This necessity in no way alters the quality of medical care provided except as outlined below, and,
Whereas, The failure to receive accreditation will work a hardship on the hospital administration, and,
Whereas, The failure to accreditation prevents the hospital from operating any approved training programs for nurses, technicians, interns and residents, and,
Whereas, These factors result in lowering the quality of patient care, be it therefore
Resolved, That the Missouri State Medical Association request the Joint Commission on Hospital Accreditation to set aside their ruling in the case of hospitals which are required by law to admit osteopathic physicians to their staffs, and be it further
Resolved, That the Joint Commission be asked to inspect these hospitals upon request and without prejudice for accreditation as soon as practical, and be it further
Resolved, That the Missouri Delegates present this resolution to the House of Delegates of the American Medical Association for its consideration.

David N. Kerr, M.D., St. Louis: Mr. Speaker, this resolution was also considered by the Reference Committee on Miscellaneous Affairs and that Committee wishes to offer the following amendment: "Be it further resolved that the Judicial Council of the A.M.A. be informed of this resolution and requested to ask the Joint Commission to inspect these hospitals upon request and without prejudice for accreditation as soon as practical."

On motion, duly seconded, this amendment was adopted.

On motion, duly seconded, the resolution as amended was adopted.

Dr. English: The next item deals with the Keogh Bill, and we recommend the resolution as follows:

Whereas, The Federal income tax laws of the United States are inequitable for self-employed persons, including the majority of practicing physicians, in that they do not allow them the tax relief accorded corporations and employees in deferring taxation of reasonable amounts of current income set aside for retirement programs, and
Whereas, House Resolution No. 10, introduced by Representative Keogh, would correct this manifest inequity, and
Whereas, House Resolution No. 10, having been passed by the House of Representatives, is now under consideration by the Senate Committee on Finance, and
Whereas, The members of the medical profession in Missouri, both present and future, have a direct and important interest in this effort to help self-employed provide for their own security in retirement, now therefore be it
Resolved, That this House of Delegates go on record as supporting House Resolution No. 10, and be it further
Resolved, That a copy of this resolution be sent to the two Missouri Senators and to Senator Harry F. Byrd, Chairman of the Senate Committee on Finance.

On motion, duly seconded, this resolution was adopted.

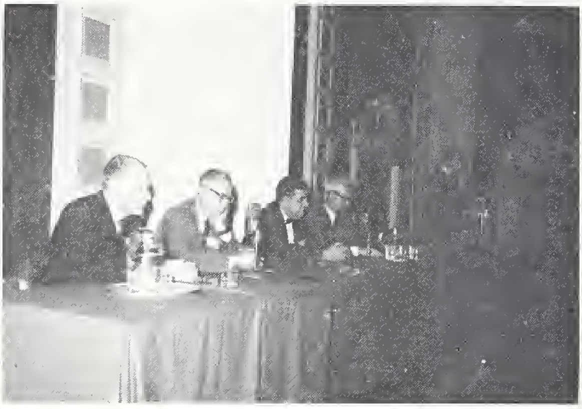
Dr. English: The third item deals with the resolution from the North Central Counties Medical Society, as follows:

Whereas, The medical care of rural communities, small towns, and cities must in part be performed in *small hospitals* which may be privately or publicly owned and managed, and
Whereas, These small hospitals perform a necessary and useful service to their communities, and
Whereas, The continued existence of some of these hospitals is jeopardized because the State Division of Health threatens to refuse them a license through their inability to carry out some changes in their buildings, equipment, or professional services, and
Whereas, Such small hospitals should not be required to comply with the same standards set up for large hospitals and medical centers, and
Whereas, Some of the changes demanded are of controversial or doubtful merit, be it hereby
Resolved, That this matter be brought to the attention of the House of Delegates of the Missouri State Medical Association, and that it be urged through appropriate study and consultation with the State Division of Health, to secure the right of deserving small hospitals to continue their existence and service to their communities.

We recommend approval of the resolution presented by the North Central Counties Medical Society and suggest that the whole problem of the licensing difficulties of the small hospital be referred for further study to the proper present committee or to a special committee.

On motion, duly seconded, this was adopted.

Dr. English: The fourth resolution concerns mental health and is as follows:



Dr. Benoit conducted a panel.

As Missouri ranks in the lower third among the states in mental health, and as one out of every ten people in the State of Missouri probably will have some mental health derangement during their lifetime, and at the present we do not have adequate care nor the physical setup, nor the trained personnal or the supporting personnel to forward a satisfactory mental program, we suggest that the mental health program be implemented to the fullest extent.

After hearing the various discussions from the floor, we are in accord that this resolution should be considered in the affirmative by the House of Delegates:

Whereas, The Missouri State Medical Association has been vitally interested in improving the Mental Health Program of the Missouri Division of Mental Diseases, and
Whereas, The passage of legislation in 1957 has resulted in the formation of a new mental health commission, and the commission has obtained the services of a highly qualified psychiatrist to direct the new mental health program in our state, and
Whereas, The new Director, Addison M. Duval, M.D., a member of this Association, together with the Missouri Mental Health Commission has recommended a central office budget of $391,301 for the next biennium, which amount was included in Section 5.100 of House Bill 63, and
Whereas, The appropriation was drastically reduced by action of the House of Representatives in the finally passed bill, known as House Committee Substitute for H.B. 63, now therefore be it
Resolved, That the Missouri State Medical Association, assembled in its Annual Session, hereby urgently requests the Missouri General Assembly to appropriate the full amount of $391,301 for the central office of the Missouri Division of Mental Diseases, in order that the staff may proceed with plans for improving the state mental health program without delay, and be it further

Resolved, That copies of the Resolution be furnished to the Governor of Missouri, the President pro tem of the Senate, the majority and minority floor leaders of the Senate, the Speaker of the House, the Speaker pro tem of the House, the majority and minority floor leaders of the House, and the Chairman of the Senate and House Committees on Appropriations.

Dr. Ellis gave the address at the University of Missouri luncheon.

The Reference Committee on Resolutions suggests that Dr. Kohler's resolution on mental health be passed and approved 100 per cent.

On motion, duly seconded, the resolution was adopted.

On motion, duly seconded, the report as a whole was adopted.

Dr. Kerr asked permission to read a telegram in connection with the resolution of the Boone County Medical Society. It read: "It is my painful duty at this time to notify you, however, that because of the action of your hospital in putting osteopaths on its staff, it is necessary for the Commissioner for Accreditation of Hospitals to withdraw as of this date, December 3, 1956, the accreditation of the Boone County Hospital, Columbia, Missouri, and at the same time please accept this letter as a request for the return of the Certificate of Accreditation issued to your hospital. The question of osteopaths on the staffs of hospitals is not an easy one to settle. Please be assured that our Commission and member organizations of the Commission have given and are giving it much consideration. However, the present rules of the Commission are: any hospital that has an osteopath on its staff or allows him the use of its facilities will not be certified for accreditation by the Joint Commission. Sincerely, Kenneth B. Babcock, M.D., Director."

David N. Kerr, M.D., St. Louis, reported for the Reference Committee on Miscellaneous Affairs.

REPORT OF THE REFERENCE COMMITTEE ON MISCELLANEOUS AFFAIRS

The Committee unanimously recommends the adoption of the listed amendments to Senate Bill 50 as introduced by the Council in its supplemental report as follows:

1. Page 2, Section 1—strike out lines 5 to 13. (This removes the definitions of the terms "the healing arts" and "to treat the sick.")
2. Page 4, Section 2 (3)—strike out the last three words on line 49 and all of lines 50 and 51. (This removes the provision for the licensing board to formulate, adopt and enforce Codes of Professional Conduct.)
3. Page 11, Section 10 (a)—strike out all of line 9. (This again removes reference to Codes of Professional Conduct.)
4. Page 15, Section 18 (a)—substitute the substance of the wording of the present medical practice act for the wording of the bill. (This replaces the words . . . "it is unlawful for any person not licensed and registered under this act as a physician and surgeon to practice the healing arts or treat the sick . . ." with ". . . it shall be unlawful for any person not now a registered physician within the meaning of the law to practice medicine or surgery in any of its departments, or to profess to cure and attempt to treat the sick and others afflicted with bodily or mental infirmities, or engage in the practice of mid-wifery in the State of Missouri, except as herein provided.")
5. Page 16, Section 20—strike out "or is treating the sick or practicing the healing arts except as is authorized by this act."
6. Page 12, Section 10 (1) (L)—strike out the entire section. (This eliminates the section pertaining to fee-splitting.)

On motion, duly seconded, this portion of the report was adopted.

DR. KERR: The next three items will be taken up separately. They were presented in the form of statements. The Committee has drawn these three phases into three separate resolutions which I feel should be accepted as resolutions from the floor. The Committee unanimously recommends the following resolution on free choice of physicians:

Dr. Winters was the banquet speaker.

WHEREAS, The American Medical Association's Commission on Medical Care Plans has requested a statement from the Missouri State Medical Association through its House of Delegates concerning our attitude toward free choice of physician as a basic principle of medical care, and

WHEREAS, It is the feeling of this House of Delegates that in spite of recent and numerous encroachments upon this free choice of physician, that such free choice should be the basic and fundamental principle of medical care, therefore, be it

Resolved, That the following definition of free choice of physician shall be the guiding definition of this Association; that any individual who accepts responsibility for the maintenance of his own health should have absolute free choice of physician, limited only by the physician's willingness to treat him. The degree of freedom inherent in this definition of free choice of physician involves: 1. The right of the patient to select his own physician. 2. The right of the physician to treat the patient. 3. The right of the patient to assign voluntarily the maintenance of his health to a nonmedical third party such as an insurance company or corporation, and be it further

Resolved, That the free choice of physician under any and every circumstance is a fundamental principle essential to good medical care without qualification.

Dr. Kerr moved that this portion of the report be referred to a reference committee for further study. On second, the motion carried.

DR. KERR: The Committee unanimously recommends the adoption of the following resolution concerning closed panel systems:

WHEREAS, The Commission on Medical Care Plans through the A.M.A. House of Delegates has requested that the Missouri State Medical Association, through this House of Delegates, convey to it their opinions concerning closed panel systems, and

Dr. Rodes conducted an instruction course.

WHEREAS, The closed panel system by nature, limits free choice of physician to a greater or lesser extent depending on the various types of panels employed, therefore, be it

Resolved, That the House of Delegates of the Missouri State Medical Association go on record as disapproving all closed panel systems and that physicians who participate in such should be aware that they are wittingly or unwittingly undermining the free and democratic practice of medicine, and such encroachments will seriously compromise the independent practice of medicine and the benefits that the patient derives therefrom.

Dr. Kerr moved that this resolution be referred to a reference committee for further study. On second, the motion carried.

DR. KERR: The Committee unanimously recommends the following resolution concerning corporate practice:

WHEREAS, Various problems concerning the corporate practice of medicine have been brought before this House of Delegates in the past, and

WHEREAS, No concise statement of this Association has previously been agreed upon, and

WHEREAS, In order to effectively condemn encroachments of this type in the medical field, therefore, be it

Resolved, That the following definition be accepted as the definition of corporate practice: "The Corporate Practice of Medicine is a system which involves the employment of a physician by an individual organization (other than an individual physician or organization composed solely and exclusively of physicians) for the purpose of rendering medical care or services to patients when the fees or remuneration for such services are collected by the organization, by a department thereof or by an associated organization and used for its general purposes rather than fully for the direct compensation of the physician rendering the care." And be it further

Resolved, That the Missouri State Medical Association, through its House of Delegates, condemn the following as examples of the corporate practice of medicine:

1. Governmental institutions which are primarily tax supported, but which charge patients deemed able to pay.
2. Governmental institutions which serve special groups, are tax supported, and make no individual charges to eligible patients.
3. General hospitals, which have teaching programs and charge for the services of physicians in training, or which employ physicians in certain departments and charge for their service.
4. Charitable institutions which are primarily supported by contributions, but which charge patients deemed able to pay.
5. Closed panel systems which charge for services on either a prepayment or postpayment basis.
6. Industrial and business firms which employ physicians to furnish care to employees either with or without charges to individuals.
7. Private individuals or corporations which employ physicians and purvey their services for profit. And be it further

Resolved, 1. That medical schools and their affiliated teaching hospitals where full-time employed instructors teach undergraduate medical students in addition to supervising the treatment of medical and surgical patients and charge for their personal services.

2. State and city institutions for the treatment of chronic conditions such as mental illness and tuberculosis, which care for private patients referred by individual practicing physicians.

3. Arrangements which have been in effect for many years between physicians and hospitals in the medical fields of radiology, pathology, anesthesiology and physical therapy, whereby the hospital bills the patient for the physician's services, be excepted; and be it further

Resolved, That 1. Charitable institutions which are supported by contributions and make no charges to eligible patients;

2. Institutions such as those set up for the treatment of the deaf, blind, crippled children, etc., which are operated and supported on a charitable basis, do not come within the definition and are therefore approved. And be it further

Reference committees studied material referred from the House.

Resolved, That it is the responsibility of the Missouri State Medical Association coordinating with the local component medical society in the area involved, to initiate and carry through with definitive action against institutions or individuals engaged in the corporate practice of medicine, unless such practice is determined to be a special situation approved by the Association as necessary under the circumstances; and be it further

Resolved, That a special committee of the Council be appointed to investigate all instances said to entail the corporate practice of medicine, to recommend to the Council courses of action in those cases which the committee determines to involve the corporate practice of medicine and to be against the long-range interest of the public, and with the approval of the Council, take whatever legal or legislative steps are necessary to force cessation of such practice in the interest of the public's welfare. It is further recommended that this committee be made up of nine members including representation of various fields of medical interest, and should be empowered, subject to Council approval, to employ legal counsel, research assistance, and other consultants in specialized or technical areas which may be necessary in the course of their work.

Dr. Kerr moved that this resolution be referred to a reference committee for further discussion and study. On second, the motion carried.

On motion of Dr. Kerr, the report as a whole was adopted.

The Speaker referred these resolutions to the Reference Committee on Miscellaneous Affairs.

IN ALCOHOLISM

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And against the main army of alcoholics—those whose drinking is a symptom of underlying pathology—less than a complete campaign is futile.

To shorten time, frustration and expense (simple efficient management) requires initial institutional care of these individuals:

1. To stop their ingestion of alcohol;
2. To detoxify the system;
3. To restore the fluid electrolyte balance;
4. To detect and correct nutritional anomalies peculiar to the individual alcoholic;
5. To overcome or reduce bodily ailments that contribute to the abnormal state and, finally
6. **To develop a program that will aid the particular individual in abstaining from all alcoholic beverages until death.**

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The Ralph Clinic (in its 62nd year) is in the advance of every phase of the treatment of alcoholism. It invites consultation with you concerning your patients with problems of excessive drinking.

(A portfolio about the Problem of Alcoholism is available upon request).

William T. McNew, M.D., Carthage, presented the report of the Reference Committee on Reports of Officers.

REPORT OF THE REFERENCE COMMITTEE ON REPORTS OF OFFICERS

The Reference Committee on Reports of Officers met in Room 362 of the Muehlebach Hotel, Sunday, April 5, at 4:00 p.m., with all members present.

The address of Dr. W. F. Francka, retiring President, and that of Dr. Ralph Perry, incoming President, were unanimously approved. The Committee wishes to express to Dr. Francka the sincere appreciation of the membership of MSMA for his able leadership during his term as president and for his many years of dedicated service in behalf of MSMA. To Dr. Perry, the Committee extends its best wishes for a successful tenure of office. The Committee also wishes to express the feeling that under his leadership with an informed and cooperative and zealous membership, the affairs of MSMA will be conducted to the advantage of the citizens of our state.

The Reports of the Secretary, the Executive Secretary and the Treasurer were approved as published.

The Report of the Council as published in the Delegate's Handbook together with the supplemental reports on Alcoholism and "Vendor" Legislation were approved.

Mr. Speaker: I move that this portion of the report be approved.

On second, this portion of the report was adopted.

The Reports of the following committees, namely, Medico-Legal, Rural Medical Service, Civil Defense, Medical Economics, Defense, Public Policy and Public Relations, were likewise approved as published.

The resolution pertaining to the adoption of an interprofessional code for physicians and attorneys which was introduced at the House of Delegates session on April 5, 1959, was studied. Inasmuch as the A.M.A. and the American Bar Association has adopted this Code, and inasmuch as a similar Code has also been adopted by the St. Louis Medical Society and the Bar Association of St. Louis and inasmuch as the need for such a Code has been expressed, the Committee approves the adoption of the resolution as stated.

On motion of Dr. McNew, duly seconded, the report was adopted.

Dr. Millikan was a guest speaker.

Hotel Muehlebac

Dr. Francka presented the gavel to Dr. Perry at the banquet.

Stanley S. Peterson, M.D., Springfield, presented the report of the Reference Committee on Medical Education and Public Welfare.

REPORT OF THE REFERENCE COMMITTEE ON MEDICAL EDUCATION AND PUBLIC WELFARE

The Reference Committee on Medical Education and Public Welfare met at 4:00 p.m., April 5, with all members present.

The report of the American Medical Education Foundation was approved and the Committee wishes to stress the paragraph as follows: "The Committee feels the individual physician should take an increasing interest in the problems of the nation's medical schools, not only in the financial problems, but those of staffing. If this is not done, the government inevitably is going to take over the job."

On motion of Dr. Peterson, duly seconded, this portion of the report was adopted.

Dr. Peterson: The Committee has considered and recommends the adoption of the following reports as published of the committees on: Laboratory Medicine, Study of Cardiac Disease, Diabetes, Control of Venereal Disease, Eye Health, Fractures, Health and Public Instruction, Maternal Welfare, Infant and Child Care, Cancer, Medical Education and Hospitals, and Publication.

On Motion of Dr. Peterson, duly seconded, this portion of the report was adopted.

Dr. Peterson: The report of the Committee on Scientific and Postgraduate Work was approved and the Committee wishes to congratulate them on the quality of the program which is being offered this year.

On motion of Dr. Peterson, duly seconded, this portion of the report was adopted.

Dr. Peterson: The Committee recommends the adoption of the report of the Committee on Mental Health but due to the far reaching implication of endorsement by the Missouri State Medical Association, the Committee feels the House should be informed of the Contents of these bills.

H.B. 47 provides for Missouri's participation in the Interstate Compact for Mental Health. On motion of Dr. Peterson, duly seconded, this portion of the report was adopted.

Dr. Peterson: S.B. 18 permits transfer of patients from state mental hospitals to rest or boarding homes.

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'CORTISPORIN'®
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Combines the anti-inflammatory effect of hydrocortisone with the comprehensive bactericidal action of the antibiotics.

Ointment: Tubes of ⅛ oz. and ½ oz. (with applicator tip) for ophthalmic or dermatologic application.
Otic Drops: Bottles of 5 cc. with sterile dropper.

Provides comprehensive bactericidal action effective against virtually all bacteria likely to be found topically.

'NEOSPORIN'®
brand **ANTIBIOTIC OINTMENT**

Ointment: Tubes of ½ and 1 oz. and tubes of ⅛ oz. with ophthalmic tip.
Ophthalmic Solution: Bottles of 10 cc. with sterile dropper.
NEW { **Lotion:** Plastic squeeze bottles of 20 cc.
Powder: Shaker-top bottles of 10 Gm.

'POLYSPORIN'®
brand **ANTIBIOTIC OINTMENT**

Offers combined antibiotic action for treating conditions due to susceptible organisms amenable to local medication.

Ointment: Tubes of ½ oz., 1 oz. and ⅛ oz. (ophthalmic tip).

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On motion of Dr. Peterson, duly seconded, this portion of the report was adopted.

Dr. Peterson: The Committee on Mental Health desires to reverse its former decision to endorse certification of psychologists and to recommend instead opposition of any efforts by the psychologists to obtain a system of state certification or licensure because of the danger that such a system inherently would promote private unsupervised practice of psychotherapy.

On motion of Dr. Peterson, duly seconded, this portion of the report was adopted.

Dr. Peterson: The portions of the report having to do with S.B. 49 regarding the Trachoma Hospital and S.B. 136 and S.B. 137 regarding the Division of Mental Health have become obsolete due to events transpiring in the Legislature and no action is recommended on these portions of the report.

On motion of Dr. Peterson, duly seconded, this portion of the report was adopted.

On motion of Dr. Peterson, duly seconded, the report as a whole was adopted.

Paul R. Whitener, M.D., St. Louis, presented the report of the Reference Committee on Necrology.

An award was presented to Dr. Scott M. Smith at the University of Missouri luncheon.

REPORT OF THE REFERENCE COMMITTEE ON NECROLOGY

The Necrology Committee met at 4:45 p.m., on April 5, 1959, and wishes to submit the following resolution.

Whereas, The Missouri State Medical Association has lost through death 70 of its members during the last year, and

Whereas, Each member contributes to the welfare of the Association and the loss of each member is keenly felt, and

Whereas, Among physicians dying in the last year were many who had devoted much time and energy to the work of the Association and who had brought credit to the profession of medicine, among them a past President, C. Edgar Virden, M.D., Kansas City, therefore be it

Resolved, That this House of Delegates makes a part of the minutes of this meeting a moment of silence in memorial to these members."

We further recommend that the office of the Missouri State Medical Association be instructed to send to the family of each deceased member a certificate of accomplishment such as follows:

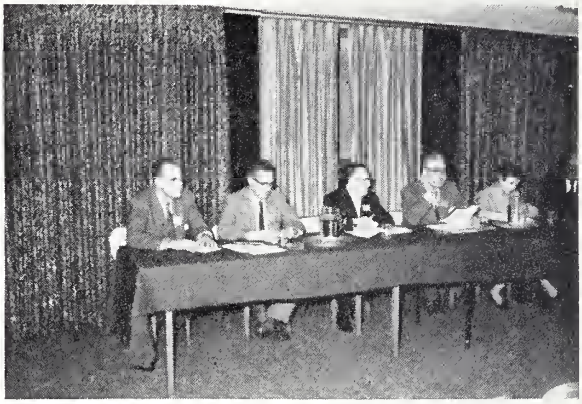
Missouri State Medical Association
(SEAL)

The Colleagues and Officers of the Missouri State Medical Association of Dr. ———————————— do hereby wish to express their sympathy and regrets to his family and friends and do hereby wish to express the loss of a most valued member of the medical profession and a member of the Missouri State Medical Association and by this instrument do hereby wish to perpetuate the memory of a friend of the patients he so loyally served during his lifetime.

————————————
President

————————————
Executive Secretary

On motion of Dr. Whitener, dully seconded, the resolution was adopted and the members of the House stood in a moment of silent memorial to the deceased members, who were:



Reference committees were open to members of the Association.

Members Deceased Since the 1958 Session

Sylvia Allen, Kansas City
Isaac N. Parish, Freeman
A. W. Kampschmidt, Bethlehem, Pa.
C. H. Dixon, Fulton
Lawrence T. Post, St. Louis
John C. Cornell, St. Louis
E. Royce Bohrer, Jefferson City
Alfred C. Ames, Mountain Grove
E. J. Del Villar, St. Joseph
Claude E. Duckett, Lamar
Paul C. Platt, Kansas City
Garnett Jones, St. Louis
Walter W. Cummins, Jr., Kansas City
Albert J. Martin, East Prairie
Harry H. Helbing, St. Louis
Eugene Barrymore, Bowling Green
E. J. Nienstedt, Sikeston
Wilson P. Cottrell, Reeds Spring
Stephen D. Smith, Columbia
Irvin M. Birenboim, Kansas City
Thomas M. Martin, St. Louis
William H. Ziegler, Boonville
Robert W. Conrad, St. Joseph
Ray B. Horton, N. Kansas City
T. Harry Saferstein, St. Joseph
William E. Shahan, St. Louis
Charles H. Nielson, St. Louis
Silas L. Durham, Dearborn
Dwight T. VanDel, Kansas City
George W. Phipps, Caruthersville
John W. Murray, Warsaw
Roy E. Myers, Joplin
C. W. Brown, St. Louis
H. E. Gerwig, Downing
C. Edgar Virden, Kansas City
Albert Beisbarth, St. Louis
William S. Wiatt, La Jolla, Calif.
Paul L. Jones, Flat River
George M. Schauffler, Kansas City
Elmer F. Kearney, Oregon
William J. Arthur, Kansas City
Ernest Sachs, New Haven, Conn.
Renick C. Schooley, Odessa
Neil. S. Moore, St. Louis
Duff S. Allen, St. Louis
W. W. Treadway, Silex
William E. Kitchell, St. Clair
Albert L. Evans, Bonne Terre
Kurt Mansbacher, St. Louis
Godfrey Fritschel, St. Louis
T. Burton Edwards, Jefferson City
Walter M. Howard, Joplin

James C. Chilton, Hannibal
George K. Swartz, St. Louis
Edgar D. Baskett, St. Petersburg, Fla.
Prince A. Holmes, Mount Vernon
Samuel E. Mitchell, Malden
Luther D. Greene, Richmond
Earl F. Morris, Nevada
Laurence E. Wood, Kansas City
Walter J. Siebert, St. Louis
Carl C. Beisbarth, St. Louis
Samuel D. Katz, St. Louis
G. Lynn Krause, St. Louis
Theodore Greiner, St. Louis
Clare J. Clapsaddle, Ste. Genevieve
Thomas B. Pote, St. Louis

On motion, duly seconded, the report was adopted.

NEW BUSINESS

Kenneth E. Knabb, M.D., Springfield: By unanimous action of the members of the Greene County Medical Society, meeting in regular session on March 27, 1959, the delegates were instructed to present the following resolution to the House of Delegates of the Missouri State Medical Association:

Whereas, It is the belief of the members of the medical profession that medical care for civilian governmental employees may best be provided through private practicing physicians, and

Whereas, The Civil Aeronautic Administration is proposing to provide medical services to Air Traffic Controllers, therefore, be it

Resolved, That the Missouri State Medical Association go on record in opposition to the proposed program of the Civil Aeronautics Administration to provide medical services to Air Traffic Controllers as constituting an entering wedge for such medical services ultimately being provided for many more federal employees, and be it further

Resolved, That copies of this resolution be sent to the United States Senators and Representatives from Missouri and that the delegates of this Association to the American Medical Association be instructed to urge a similar resolution by the House of Delegates of that organization.

The Speaker referred this resolution to the Reference Committee on Miscellaneous Affairs.

Drs. Scourse, Hall, Duval and Perry met between sessions.

There being no further business, the second session of the House adjourned at 5:40 p.m.

Wednesday, April 8, 1959

The House of Delegates convened at 1:30 p.m., April 8, 1959, in the Colonial Ball Room, Hotel Muehlebach, Kansas City, with Oscar P. Hampton, M.D., University City, Speaker, Presiding.

Kenneth E. Knabb, M.D., Springfield, reported for the Committee on Credentials.

Mr. Tom R. O'Brien, Executive Secretary, read the roll call which showed that a quorum was present.

John I. Matthews, M.D., Jefferson City, Secretary, read the minutes of the Sunday and Monday meetings of the House of Delegates.

On motion, duly seconded, the minutes were adopted.

John P. Ferguson, M.D., Springfield, presented the report of the Committee on Nominations.

Committees prepared reports for the House.

REPORT OF THE NOMINATING COMMITTEE

For Vice Presidents: James R. Meador, M.D., Clayton; G. D. Shull, M.D., Jefferson City; J. J. Wimp, M.D., Kirksville.

For Delegates to the American Medical Association: A. W. Neilson, M.D., St. Louis, and Richard H. Kiene, M.D., Kansas City; alternates, Dean Sauer, M.D., St. Louis, and Rolla B. Wray, M.D., Nevada.

For Speaker of the House of Delegates: Oscar P. Hampton, M.D., University City. Vice Speaker, William C. Mixson, M.D., Kansas City.

There being no nominations from the floor, on motion duly seconded, these officers were declared elected.

R. B. Bassett, M.D., St. Louis: As chairman of the St. Louis delegation and in accordance with a mandate from this delegation, I wish to place in nomination for the office of President-Elect of this Association the name of a man who is perhaps better known to you than any man in this assembly.

He has held many responsible positions in this organization and in the one which is now proposing him. At the time he is completing a term as Treasurer of the Association. He has devoted many years of service to organized medicine, often to the detriment of his private practice. He has accepted every charge placed upon him with a spirit of willingness and cooperation and with no thought of the sacrifice involved.

He has the courage of his convictions and will speak out for those things he believes to be right—yet at the same time he will fight for a divergent majority opinion. He has made enemies—for as we all know a man in any office cannot please everyone—yet it is significant that none of these has been lasting. We are all his friends.

In my opinion and in the opinion of my delegation he will make one of the finest presidents we have ever had and leave in the annals of our Association a record which will be difficult to duplicate.

It is with a great deal of pleasure and a deep feeling of pride in being privileged to make this nomination,

"ankle-itis"
there's pain and
inflammation here...
it could be mild
or severe, acute or
chronic, primary or
secondary fibrositis — or even
early rheumatoid arthritis

more potent and comprehensive treatment than salicylate alone

assured anti-inflammatory effect of low-dosage corticosteroid[1] . . . additive antirheumatic action of corticosteroid plus salicylate[2-5] brings rapid pain relief; aids restoration of function . . . wide range of application including the entire fibrositis syndrome as well as early or mild rheumatoid arthritis

more conservative and manageable than full-dosage corticosteroid therapy—

much less likelihood of treatment-interrupting side effects[1-6] . . . reduces possibility of residual injury . . . simple, flexible dosage schedule

THERAPY SHOULD BE INDIVIDUALIZED

acute conditions: Two or three tablets four times daily. After desired response is obtained, gradually reduce daily dosage and then discontinue.

subacute or chronic conditions: Initially as above. When satisfactory control is obtained, gradually reduce the daily dosage to minimum effective maintenance level. For best results administer after meals and at bedtime.

precautions: Because SIGMAGEN contains prednisone, the same precautions and contraindications observed with this steroid apply also to the use of SIGMAGEN.

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Sigmagen®

corticoid-salicylate compound tablets

Composition

METICORTEN® (prednisone)	0.75 mg.
Acetylsalicylic acid	325 mg.
Aluminum hydroxide	75 mg.
Ascorbic acid	20 mg.

Packaging: SIGMAGEN Tablets, bottles of 100 and 1000.

References: 1. Spies, T. D., et al.: J.A.M.A. 159:645, 1955. 2. Spies, T. D., et al.: Postgrad. Med. 17:1, 1955. 3. Gelli, G., and Della Santa, L.: Minerva Pediat. 7:1456, 1955. 4. Guerra, F.: Fed. Proc. 12:326, 1953. 5. Busse, E. A.: Clin. Med. 2:1105, 1955. 6. Sticker, R. B.: Panel Discussion, Ohio State M. J. 52:1037, 1956.

Schering

SG-J-610

I give you the name of Ray Muether, gentleman par excellence, for President-Elect.

There being no other nominations, a motion, duly seconded, that the nominations cease, carried.

Dr. Muether was escorted to the rostrum.

On motion, duly seconded, Dr. Muether was elected President-Elect.

R. O. Muether, M.D., St. Louis: When I heard that eulogy, I thought sure they were talking about someone else. I do appreciate deeply this honor which has been conferred upon me and hope that I will be able to come somewhat close to doing the things that you expect. Thank You.

The Secretary announced the following reports of election of Councilors: Second District, J. J. Wimp, M.D., Kirksville; Fourth District, Paul R. Whitener, M.D., St. Louis; Sixth District, O. B. Barger, M.D., Harrisonville; Eighth District, W. W. Tillman, M.D., Springfield; Tenth District, Ben M. Bull, M.D., Ironton.

W. W. Gist, M.D., Kansas City, gave the report for the Reference Committee on Amendments to the Constitution and By-Laws.

Dr. Muether addressed the House briefly.

REPORT OF THE REFERENCE COMMITTEE ON AMENDMENTS TO THE CONSTITUTION AND BY-LAWS

Mr. Speaker: The Committee on Amendments to the Constitution and By-Laws met in an open hearing in special session on April 6, 1959 at 5:20 p.m. At that time the resolution concerning Medical Services for the Low-Income Aged was considered.

The Committee felt that this resolution should be accepted with the following changes in the wording of the resolution and to read as follows:

Whereas, The medical profession of the State of Missouri has provided medical care to the needy citizens of Missouri for over a century and

Whereas, The physicians have participated in and developed programs to aid the low-income citizens of Missouri, through encouraging and supporting prepayment programs for obtaining adequate medical care for them on a non-charitable basis, and

Whereas, The House of Delegates of the American Medical Association has, by resolution, urged all physicians to continue to provide medical care to low-income aged groups with particular attention to economic circumstances, therefore, be it

Resolved, By the House of Delegates of the Missouri State Medical Association, that all members of this Association are urged to express in their daily practice the intent and purpose of the resolution of the American Medical Association; and, be it further

Resolved, That the members of this association recommend and encourage the further development of programs for the medical care of the low-income aged consistent with traditions of the medical profession.

On motion of Dr. Gist, duly seconded, the report and the resolution were adopted.

Dr. Kerr presented the report of the Reference Committee on Miscellaneous Affairs.

REPORT OF THE REFERENCE COMMITTEE ON MISCELLANEOUS AFFAIRS

The Reference Committee on Miscellaneous Affairs met in the Colonial Ball Room of the Muehlebach Hotel, Monday, April 6, at 6:00 p.m., and on Tuesday, April 7, in Room T22 at 4:30 p.m. All members were present for the first meeting, with four present at the second meeting.

The Committee unanimously recommends approval of the resolution of the Greene County Medical Society concerning opposition of the Missouri State Medical Association to the proposed program of the Civil Aeronautics Administration to provide medical services to Air Traffic Controllers.

Mr. Speaker, I move the adoption of this portion of the report.

On second, this portion of the report was accepted.

Dr. Kerr: This is the resolution on free choice of physician.

The Committee unanimously presents the following resolution:

FREE CHOICE OF PHYSICIANS

Whereas, The American Medical Association's Commission on Medical Care Plans has requested a statement from the Missouri State Medical Association through its House of Delegates concerning our attitude toward free choice of physicians as a basic principle of medical care, and

Whereas, It is the decision of this House of Delegates that in spite of recent and numerous encroachments upon the free choice of physician, that such free choice should be the basic and fundamental principle of medical care, therefore, be it.

Resolved, That the Missouri State Medical Association shall accept the following definition of Free Choice of Physician as a guide for future action: Free Choice is a principle or concept wherein an individual either retains the right to select his own physician from all those available and willing to render medical care, or to voluntarily relinquish or delegate to others, the financial responsibility for his medical care, and the selection of a physician. And, be it further

Resolved, That on the basis of this definition, the free choice of physician under any and every circumstance is a fundamental principle essential to good medical care.

Mr. Speaker, I move the adoption of this portion of the report.

On second, the motion carried.

A NEW USE FOR VESPRIN

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in anxiety and tension states / psychomotor agitation / phobic reactions / obsessive reactions / senile agitation / agitated depression / emotional stress associated with a wide variety of physical conditions

In the patient with anxiety and tension symptoms — Vesprin calms him down without slowing him up... and does not interfere with his working capacity. Vesprin permits tranquilization *without* oversedation, lethargy, apathy or loss of mental clarity.[1]

And Vesprin exhibits an improved therapeutic ratio — enhanced efficacy with a low incidence of side effects; no reported hypotension, extrapyramidal symptoms, blood dyscrasia or jaundice in patients treated for anxiety and tension.[1,2,3]

dosage: for "round-the-clock" control — 10 mg. to 25 mg., b.i.d.; for "once-a-day" use — 25 mg. once a day, appropriately scheduled, for therapy or prevention. **supply:** Oral Tablets, 10, 25 and 50 mg., press-coated, bottles of 50 and 500; Emulsion (Vesprin Base) — 30 cc. dropper bottles and 120 cc. bottles (10 mg./cc.). **references:** 1. Stone, H.H.: Monographs on Therapy *3*:1 (May) 1958. 2. Reeves, J.E. Postgrad. Med. *24*:687 (Dec.) 1958. 3. Burstein, F.: Clinical Research Notes *2*:3, 1959. 4. Kris, E.: Clinical Research Notes *2*:1, 1959. 'VESPRIN'® is a Squibb Trademark

Vesprin—the tranquilizer that fills a need in every major area of medical practice

SQUIBB
Squibb Quality —
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Dr. Kerr: The Reference Committee on Miscellaneous Affairs unanimously presents the following resolution on closed panel systems:

Drs. Perry and Francka take part in banquet activities.

CLOSED PANEL SYSTEMS

Whereas, The Commission on Medical Care Plans through the A.M.A. House of Delegates has requested that the Missouri State Medical Association, through the House of Delegates convey to it their opinions concerning closed panel systems, and

Whereas, The closed panel systems by nature, limit free choice of physician to a greater or lesser extent depending on the various types of panels employed, therefore, be it

Resolved, That the House of Delegates of the Missouri State Medical Association go on record as disapproving all closed panel systems, which limit the free choice of physicians, and that physicians who participate in such should be aware that they are undermining the free and democratic practice of medicine, and such encroachments will seriously compromise the independent practice of medicine and the benefits that the patient derives therefrom.

Mr. Speaker, I move the adoption of this portion of the report.

On second, the motion carried.

Dr. Kerr: The Reference Committee on Miscellaneous Affairs presents the following recommendations on the corporate practice of medicine:

CORPORATE PRACTICE OF MEDICINE

Whereas, Various problems concerning the corporate practice of medicine have been brought before this House of Delegates in the past, and

Whereas, No concise statement of this Association has previously been agreed upon, and

Past Presidents were honored at the banquet.

Whereas, In order to effectively condemn encroachments of this type in the medical field, it is necessary that the House of Delegates take definite action by accepting as the definition of corporate practice: The Corporate Practice of Medicine is a system which involves the employment of a physician or para-medical personnel by an individual organization (other than an individual physician or organization composed solely and exclusively of physicians) for the purpose of rendering medical care or services to patients when the fees or remuneration for such services are collected by the organization, by a department thereof or by an associated organization and used for its general purposes rather than fully for the direct compensation of the physician rendering the care.

It is the recommendation of the House of Delegates that the Missouri State Medical Association condemn the following as some examples of the Corporate Practice of Medicine:

1. Governmental institutions which are primarily tax supported, but which charge patients deemed able to pay.
2. General hospitals, which have teaching programs and charge for the services of physicians in training.
3. Closed panel systems which charge for services on either a prepayment or post-payment basis.
4. Private individuals or corporations which employ physicians and purvey their services for profit.

And, it is further recommended that the following are excluded:

1. Medical schools and their affiliated teaching hospitals where full-time employed instructors, primarily engaged in the teaching of undergraduate medical students in addition to supervising the treatment of medical and surgical patients, charge for their personal services.
2. State and city institutions for the treatment of chronic conditions such as mental illness and tuberculosis, which care for private patients referred by individual practicing physicians.

And, be it further recommended, that the following, since they do not come within the definition of the act, are therefore, also excluded:

1. Charitable institutions which are supported by contributions and make no charges to eligible patients;

The banquet was held on Tuesday evening.

2. Institutions such as those set up for the treatment of the deaf, blind, crippled children, etc., which are operated and supported on a charitable basis.

And, further be it recommended,

That it is the responsibility of the Missouri State Medical Association coordinating with the local component medical society in the area involved, to initiate and carry through with definitive action against institutions or individuals engaged in the corporate practice of medicine, unless such practice is determined to be a special situation approved by the Association as necessary under the circumstances, and be it further

Recommended, That a special committee of the Missouri State Medical Association be appointed to investigate all instances said to entail the corporate practice of medicine, to recommend to the Council courses of action in those cases which the committee determines to involve the corporate practice of medicine and to be against the long-range interest of the public, and with the approval of the Council, take whatever legal or legislative steps are necessary to force cessation of such practice in the interest of the public's welfare. It is further recommended that this committee be made up of nine members including representation of various fields of medical interest, and should be empowered, subject to Council approval, to employ legal counsel, research assistance, and other consultants in specialized or technical areas which may be necessary in the course of their work.

And it is further recommended that our delegates to the A.M.A. inform that organization that such a committee is being formed by the Missouri State Medical Association to study the broad fields of corporate practice, free choice of

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and pink color make POMALIN pleasant to take and appealing to both children and adults.

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FORMULA:
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Pectin	225 mg.
Kaolin	3 Gm.
Opium tincture (equivalent to 2 cc. paregoric)	0.08 cc.

SUPPLIED:
Bottles of 16 fl. oz.
Exempt Narcotic.
Available on Prescription Only.

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New York 18, N. Y.

DOSAGE:

ADULTS: Initially 1 or 2 tablespoons from four to six times daily, or 1 or 2 teaspoons after each loose bowel movement; reduce dosage as diarrhea subsides.

CHILDREN: ½ teaspoon (=2.5 cc.) per 15 lb. of body weight every four hours day and night until stools are reduced to five daily, then every eight hours for three days.

physicians and Group Plans, and to act for the Association in connection therewith.

Mr. Speaker, I move that these recommendations of the House of Delegates of the Missouri State Medical Association be referred to the Council for further study and action, and report to the House of Delegates at the next Annual Session.

The motion was seconded.

R. B. Bassett, M.D., St. Louis: I move that by amendment the words "or para-medical personnel" be eliminated.

On second and standing vote, the amendment was adopted.

Dr. Bassett: I move that the numbered definitions in the resolution on corporate practice be eliminated, leaving these decisions to the committee which will implement the resolution.

After second, on vote the amendment lost.

Delegates were seated by districts.

On motion, duly seconded, the report as amended was adopted.

Dr. Peterson presented the report of the Reference Committee on Medical Education and Public Welfare.

REPORT OF THE REFERENCE COMMITTEE ON MEDICAL EDUCATION AND PUBLIC WELFARE

This is a supplemental report of the Reference Committee on Medical Education and Public Welfare. The Committee met with the Council of the Association, President Elmer Ellis of the University of Missouri, and Dr. Kerns, Director of the Missouri State Crippled Children's Service, on the afternoon of April 7 and discussed at some length S.B. 368, having to do with the Crippled Children's Service.

The Reference Committee recommends that the House of Delegates take no action on this bill and that it be returned to the Council for further consideration.

On motion, duly seconded, the report was adopted.

The Speaker: The next order of business is a proposed amendment to the By-laws which was adopted in committee report and has been on the table for the required one day. It is to amend Chapter 7, Section 2 (page 7) by adding immediately following "A Committee on Physical Medicine and Rehabilitation" the following: "A Committee on Aging," and further amending Chapter 7, Section 2 (page 8) by adding immediately before Section 3, the following: "The Committee on Aging shall consider matters concerned with the problem of our aging population in relation to health care."

Concurrent instruction courses were a part of the scientific session.

On motion, duly seconded, the amendment was adopted.

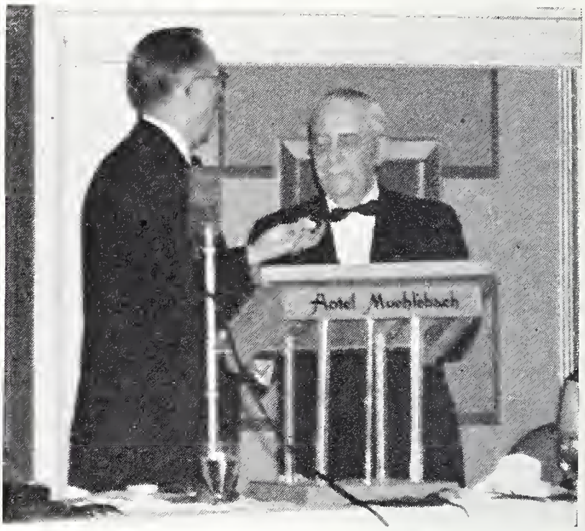
John A. Growdon, M.D., Kansas City, addressed the assembly briefly asking that future scientific programs of the Association use Missouri physicians on the program.

The Speaker installed the President, the President-Elect, the Vice Presidents, the A.M.A. Delegates and Alternates, the Councilors and Vice Speaker of the House.

Ralph Perry, M.D., Kansas City, read the appointments to committees to fill expired terms and chairmenships, which were approved by the House of Delegates, as follows:

COMMITTEE APPOINTMENTS, 1959

Scientific and Postgraduate Work: John I. Matthews, Jefferson City, Chairman; John A. Growdon, Kansas City; M. Pinson Neal, Columbia. Associate Members: W. P. Maddux, Springfield; J. H. Keim, Cape Girardeau; Wilbur A. Mullarky, St. Louis; Wyeth Hamlin,



Dr. Perry presented the Past President's Key to Dr. Francka.

The wonderful moment when a fifteen-footer drops in . . .

"*Good for you!*"

GREAT PUTT! A real honey. One like *that* makes the whole day worth while. Now relax . . . sit back with a good cold glass of beer. It'll quench your thirst—sure. But much more. Beer's bright, wonderful, alive. Nothing's more rewarding—and it really picks you up, too.

Beer Belongs—to the fun of living!

United States Brewers Foundation
CHARTERED 1862

Beer's rich in wonderful, healthful things. Nature's own choice barley malt, hops, minerals, and the purest water. Good wholesome beer or ale perks you up—won't let you down.

Hannibal; Kenneth K. Keown, Columbia; Robert Smith, Marceline.

Defense: C. E. Hyndman, St. Louis, Chairman; Roland S. Kieffer, St. Louis; Joseph G. Webster, Kansas City.

Public Policy and Public Relations: Ray Muether, St. Louis, Chairman; C. C. Cohrs, Moberly; R. J. Crider, St. Charles; Rolla B. Wray, Nevada; James E. McConchie, Independence; C. B. Schoeberl, Joplin; H. W. Carrington, Lebanon; John R. Dixon, Brookfield; R. R. Lyle, Versailles.

Medical Education and Hospitals: Kenneth Glover, Mount Vernon, Chairman; Wm. A. Knight, Jr., St. Louis. Associate Member: J. S. Roden, Columbia.

Cancer: Marvin L. Napper, Springfield, Chairman; John Modlin, Columbia (To fill the unexpired term of Thomas M. Martin, deceased); George A. Carroll, St. Louis; E. Kip Robinson, Kansas City. Associate Members: John E. Lamy, Sedalia; Byron E. Watts, Jefferson City; Charles E. Lockhart, Springfield; Milton Shoss, Cape Girardeau; A. N. Arneson, St. Louis; James R. McVay, Jr., Kansas City.

Medical Economics: A. P. Rowlette, Moberly, Chairman; George L. Hawkins, St. Louis. Associate Members: R. D. Duncan, Springfield; G. W. Winn, Boonville; E. D. Imes, Maryville; John T. Crowe, Cape Girardeau; Robert E. Kirshman, Joplin.

The House members listened attentively.

Mental Health: John J. O'Hearne, Kansas City, Chairman; Robert J. Mueller, St. Louis; H. V. Guhleman, Jr., Jefferson City; James N. Haddock, Webster Groves; D. R. Edwards, Sedalia; A. L. Brown, Springfield; Arnold S. Block, St. Louis; Albert Preston, Jr., Kansas City; N. Venay Bolin, Kansas City.

Maternal Welfare: James E. Keeler, Kansas City, Chairman; William B. See, Columbia; E. E. Wadlow, St. Joseph. Associate Members: P. V. Siegel, Smithton; H. C. Willumson, St. Joseph; A. C. Trueblood, Jr., St. Louis; Irwin T. Craig, Joplin; J. J. Wimp, Kirksville; Forrest C. Long, Savannah; E. G. Hamilton, St. Louis; A. B. Sinclair, Kansas City.

Infant and Child Care: E. J. Schwartz, Springfield, Chairman; Daniel B. Landau, Hannibal; H. E. Petersen, St. Joseph; R. J. LaDriere, St. Louis; Guy N. Magness, University City; L. L. Davis, Jr., Mexico; James J. Pascoe, Nevada; Jack N. Wiles, West Plains; James A. Kinder, Cape Girardeau; Sanford Cockerell, Independence.

The banquet was held in the Colonial Ball Room.

Health and Public Instruction: J. R. McDaniel, St. Joseph, Chairman; Roy A. Walther, Jr., Overland; F. H. Hartwig, Kansas City. Associate Members: William McNew, Carthage; Chester Peck, Kennett.

Constitution and By-Laws: W. A. Bloom, Fayette, Chairman; H. M. Parker, Kansas City; Charles E. Martin, St. Louis.

Fractures: Robert E. Funsch, University City, Chairman; Paul W. Meyer, Kansas City; Lee T. Ford, Jr., St. Louis. Associate Members: William C. Francis, Springfield; B. L. Murphy, Hannibal; Otis E. James, Kansas City; William C. Critchlow, Sikeston.

Eye Health: John McLeod, Kansas City, Chairman; T. E. Sanders, St. Louis; H. B. Stauffer, Jefferson City. Associate Members: Dick H. Underwood, Kansas City; Paul B. Webb, St. Louis; Michael F. Pernoud, St. Louis; D. E. Eggleston, Macon; W. L. Post, Joplin; Robert S. Minton, St. Joseph; William Wilcoxen, Bowling Green.

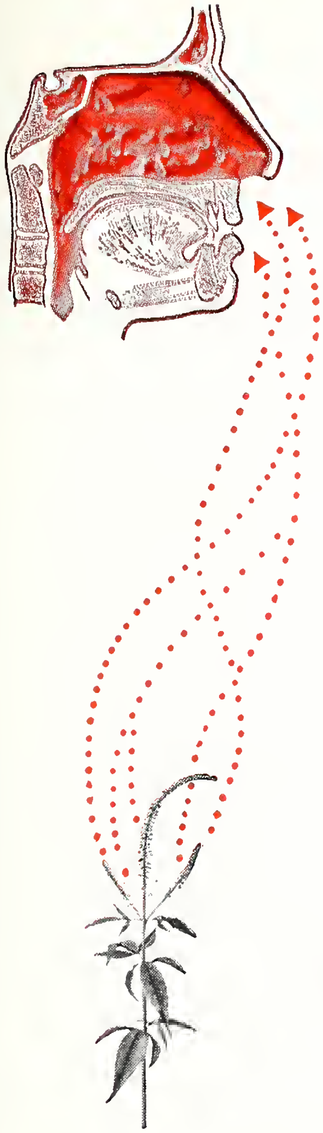
Control of Venereal Disease: E. M. Powell, Springfield, Chairman; T. E. McMillan, Kansas City. Associate Member: John E. Byrne, St. Louis.

Industrial Health: H. M. Roebber, Bonne Terre, Chairman; S. W. Scorse, Joplin. Associate Members: James W. Clawson, Springfield; C. Rush McAdam, St. Louis.

Diabetes: H. E. Oppenheimer, Clayton, Chairman; Lucien W. Ide, St. Joseph. Associate Members: Wm. H. Olmsted, St. Louis; Robert E. Koch, Clayton; Ralph S. Casford, Kansas City; J. H. Walterscheid, Hannibal.

Anesthesiology: Russell Shelden, Kansas City, Chairman; E. O. Kraft, St. Louis.

New officers took the Oath of Office.



when pollen allergens attack the nose...

Triaminic provides more effective therapy in respiratory allergies because it combines two antihistamines[1,2] with a decongestant.

These antihistamines block the effect of histamine on the nasal and paranasal capillaries, preventing dilation and exudation.[3] *This is not enough;* by the time the physician is called on to provide relief, histamine damage is usually present and should be counteracted.

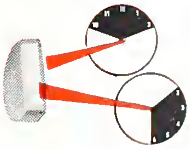
The decongestive action of orally active phenylpropanolamine helps contract the engorged capillaries, reducing congestion and bringing prompt relief from nasal stuffiness, rhinorrhea, sneezing and sinusitis.[4,5]

TRIAMINIC is orally administered, systemically distributed and reaches *all* respiratory membranes, avoiding nose drop addiction and rebound congestion.[6,7] TRIAMINIC can be prescribed for prompt relief in summer allergies, including hay fever.

References: 1. Sheldon, J. M.: Postgrad. Med. **14**:465 (Dec.) 1953. 2. Hubbard, T. F. and Berger, A. J.: Annals Allergy p. 350 (May-June) 1950. 3. Kline, B. S.: J. Allergy **19**:19 (Jan.) 1948. 4. Goodman, L. S. and Gilman, A.: Pharmacol. Basis Ther., Macmillan, New York, 1956, p. 532. 5. Fabricant, N. D.: E.E.N.T. Monthly **37**:460 (July) 1958. 6. Lhotka, F. M.: Illinois M.J. **112**:259 (Dec.) 1957. 7. Farmer, D. F.: Clin. Med. **5**:1183 (Sept.) 1958.

Triaminic®

TRIAMINIC provides around-the-clock freedom from hay fever and other allergic respiratory symptoms with just one tablet q. 6-8 h. because of the special timed-release design.



Each TRIAMINIC timed-release tablet provides:
Phenylpropanolamine HCl..............50 mg.
Pheniramine maleate........................25 mg.
Pyrilamine maleate...........................25 mg.

Also available: TRIAMINIC SYRUP for those patients of all ages who prefer a liquid medication. Each 5 ml. teaspoonful is equivalent to ¼ Triaminic Tablet or ½ Triaminic Juvelet. TRIAMINIC JUVELETS provide half the dosage of the Triaminic Tablet with the same timed-release action for prompt and prolonged relief.

STOP *running noses* *and open stuffed noses orally*

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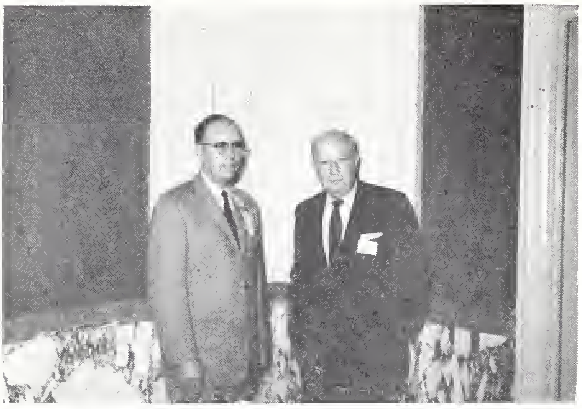

President Perry and President-elect Muether pose for picture.

Hospital and Professional Relations: Hollis Allen, St. Louis, Chairman; Victor B. Buhler, Kansas City. Associate Members: W. F. Francka, Hannibal; Ralph Perry, Kansas City.

Laboratory Medicine: Hollis Allen, St. Louis, Chairman; Joseph E. Flynn, Columbia.

Physical Medicine and Rehabilitation: D. Elliott O'Reilly, St. Louis, Chairman; F. D. Sundstrom, Springfield; William J. Stewart, Columbia. Associate Member: Otakar Machek, St. Louis.

Civil Defense: Carl D. Siegel, Sedalia, Chairman; Wm. C. Allen, Glasgow; H. D. Steinbeck, Union; Carroll C. Hungate, Kansas City; A. S. Bristow, Princeton; John R. Forgrave, St. Joseph; J. M. Canella, Hannibal; Curtis H. Lohr, Clayton; R. Ned White, Springfield; George E. Thoma, St. Louis; George L. Watkins, Farmington; John A. Griffith, Jr., Kansas City.

Tuberculosis: F. E. MacInnis, Kansas City, Chairman; Paul Murphy, St. Louis; H. M. Roberts, Kansas City; Joseph L. Lucido, St. Louis; Walter C. Gray, St. Louis; David N. Kerr, St. Louis; Glenn O. Turner, Springfield; Carl Popp, Sikeston.

Study of Cardiac Disease: Earl L. Loyd, Jefferson City, Chairman; E. Lee Shrader, St. Louis; Wm. I. Park, Springfield; E. J. McIntire, Carthage; A. M. Estes, Cape Girardeau; Stanley F. Morest, Kansas City; William J. Gillespie, St. Louis; Carl A. Potter, Jr., St. Joseph; E. E. Glenn, Springfield; Martin J. Mueller, Kansas City.

Rural Medical Service: A. E. Spelman, Smithville, Chairman; William J. Shaw, Fayette; B. J. Bass, Salem; Jack F. Pearl, St. Clair; Charles H. Lewellen, Louisiana; C. A. McBurney, Slater; Jack Mullen, Bonne Terre; A. J. C. McCallum, Aurora.

The Council convened following the House of Delegates.

American Medical Education Foundation: James P. Murphy, St. Louis, Chairman; Hugh E. Stephenson, Columbia; Donald F. Gose, Springfield; Russell Shelden, Kansas City; Allen I. Herrmann, St. Joseph.

Joseph L. Fisher, M.D., St. Joseph, moved that the Jackson County Medical Society be thanked for its hospitality. On second, the motion carried.

Paul Max, M.D., St. Louis, speaking for the St. Louis Medical Society and the St. Louis County Medical Society, invited the Association to meet in St. Louis in 1960.

Upon motion, duly seconded, the invitation was accepted.

Upon motion, duly seconded, the House of Delegates adjourned at 2:45 p.m.

THE COUNCIL

The Council met at 9:00 a.m., Sunday, April 5, at the Muehlebach Hotel, Kansas City, with J. H. Summers, M.D., Chairman, presiding. Those present were Drs. Summers, Donald M. Dowell, Chillicothe; B. L. Murphy, Hannibal; Leonard T. Furlow, St. Louis; Joseph C. Creech, Troy; B. M. Stuart, Boonville; C. G. Stauffacher, Sedalia; Kenneth C. Hollweg, Kansas City; W. W. Tillman, Springfield; Ben M. Bull, Ironton; W. F. Francka, Hannibal; Ralph Perry, Kansas City; John I. Matthews, Jefferson City; R. O. Muether, St. Louis; Joseph C. Peden, St. Louis; H. E. Petersen, St. Joseph; Durward G. Hall, Springfield; Oscar P. Hampton, University City; Messrs. John W. Noble, Kennett; John Buckner, Springfield; Jordan Singleton, Lemoine Skinner, Tom R. O'Brien, and Miss Helen Penn, St. Louis.

WOMAN'S AUXILIARY

A letter from the Woman's Auxiliary was read asking the appointment of Drs. Ralph Perry, W. W. Tillman and Henry C. Bauman as an advisory committee. This was approved.

STUDENT MEDICAL ASSOCIATION

A letter was presented requesting assistance in defraying expenses of two delegates to the Student Medical Association meeting. After discussion, on motion of Dr. Hollweg, it was voted that this was a county society responsibility rather than that of the state.

RURAL HEALTH CONFERENCE

A letter was presented from Mr. Chester Starr asking that the Association join with the Jackson County Medical Society in inviting the A.M.A. Rural Health Conference to meet in Kansas City in 1962. On motion, this was approved.

COUNCIL ON AGING

It was announced that there would be a meeting of the Joint Council on Aging in Washington, D. C., on June 12 and 14. It was decided that the Association should be represented but definite action was delayed.

DIABETES ASSOCIATION

A letter from Dr. Oppenheimer was read requesting that the Council appoint a member of the American

Diabetes Association. Dr. Lucien Ide of St. Joseph was, on motion reappointed.

SENATE BILL 50

S.B. 50 and amendments thereto were discussed and on motion of Dr. Furlow, the action of the committee which met with the osteopaths was approved.

S.B. 368

It was announced that the President of the University of Missouri would meet with the Council on April 7 to discuss the Crippled Children's Service and S.B. 368.

SUPPLEMENTAL REPORT OF THE COUNCIL

Presentation on Vendor Legislation, Aging, Keogh Bill, Alcoholism, Corporate Practice, and S.B. 50 as amended, were approved for presentation to the House of Delegates.

HOSPITAL COSTS

It was suggested that the problem of hospital costs is a state-wide problem and that a study by a special committee on the rising costs to the patient might be informational.

Meeting of April 7

The Council met on Tuesday, April 7, at 2:00 p.m., in order to discuss Senate Bill 368, the State Crippled Children's Act. The Reference Committee on Medical Education and Public Welfare, composed of Drs. Stanley S. Peterson, Springfield; William Eubank, Kansas City; W. C. Baker, Savannah; Charles S. Sherwin, St. Louis, and Roy W. Pearse, Nevada, met with the Council.

Dr. Elmer Ellis, President of the University of Missouri, and Dr. Kerns, administrator of the Crippled Children's Service, attended the meeting.

On motion, the Council recommended the following changes in Senate Bill 368:

Section 4. Delete lines 9 to 20, inclusive, and substitute in lieu thereof the following: Any such child who, or whose parents, guardian, or other person legally chargeable with the support of the child, is able to pay a portion but not all of the expenses for the required services for the child, shall be entitled to the services if the child, parents, guardian or other person legally charged with the support of the child shall pay such amounts thereof to the hospital and physician as the child, parents, guardian, or other persons legally charged with the support of the child is reasonably able to pay.

Section 6 (1). Line 2. Delete the word "may" and substitute the word "shall."

Section 6 (2). Line 7. Delete the word "may" and substitute the word "shall."

Section 6 (4). Delete lines 21 to 24, inclusive, and substitute the following: shall receive title to property, real or personal, in all case of gifts, devises, or bequests to the Service and may act as trustee and as such receive title to property, real or personal, where given in trust for the benefit of the Service.

Section 12. Line 4. Delete the period and add "or as provided herein."

Section 13. Delete Section 13 and insert in lieu thereof the following: "Section 13. The administrator shall appoint a general advisory committee, the majority of which shall be doctors of medicine and residents of the State of Missouri, to counsel and advise it in the administration of this chapter and particularly with reference to the adoption and administration of a plan or plans as provided in Sections 6 and 8 hereof."

These were submitted to President Ellis and Dr. Kerns and they indicated that they would have no objections to these amendments.

Meeting of April 8

The Council met at Hotel Muehlebach, Kansas City, on April 8, 1959, immediately following the House of Delegates. Ralph Perry, M.D., Kansas City, President, called the session to order. Those present were Drs. Perry, R. O. Muether, St. Louis; Donald M. Dowell, Chillicothe; Leonard T. Furlow, St. Louis; Paul R. Whitener, St. Louis; B. M. Stuart, Boonville; O. B. Barger, Harrisonville; Kenneth C. Hollweg, Kansas City; W. W. Tillman, Springfield; J. H. Summers, Lebanon; Ben M. Bull, Ironton; Mr. Tom R. O'Brien and Helen Penn, St. Louis.

Dr. Perry opened the Council meeting and asked for nominations for Chairman of the Council. J. H. Summers, M.D., Lebanon, was elected Chairman of the Council and took the chair.

Other officers elected were Vice Chairman, Donald M. Dowell, M.D., Chillicothe; Secretary, John I. Matthews, M.D., Jefferson City; Treasurer, Charles R. Doyle, M.D., St. Louis.

New Councilors were introduced, Paul R. Whitener, M.D., St. Louis, 4th District; O. B. Barger, M.D., Harrisonville, 6th District. J. J. Wimp, M.D., Kirksville, 2nd District, was not present.

1961 SESSION

Mr. O'Brien asked advice of the Council concerning the 1961 Annual Session. It was decided that arrangements should be made at Hotel Muehlebach for the 1961 session.

COUNCIL ON AGING

It was decided that Dr. Perry, Mr. O'Brien and the chairman of the new Committee on Aging should attend the Joint Council on Health Care of the Aged in Washington, June 12 to 14.

NEXT MEETING

It was decided that the next meeting of the Council should be held in June, on call of the Chairman, and in September, probably in Kansas City at the invitation of Dr. Perry.

J. H. SUMMERS, *Chairman.*

REGISTRATION AT THE ONE HUNDRED AND FIRST ANNUAL SESSION

First Councilor District—45

Baker, Warren C., Savannah
Bauman, Henry C., Maryville
Benson, Scott C., St. Joseph
Bohnsack, Ralph W., Brookfield
Brewer, Lake, Ridgeway
Broyles, Watkins A., Bethany
Carlin, Albert L., Stanberry
Clark, C. L., Trenton
Conrad, Joseph A., Chillicothe
Cullers, Charles H., Trenton
Daley, Frank, Hamilton
Dixon, John R., Brookfield
Dunshee, R. E., Maryville
Fisher, Joseph L., St. Joseph
Goldberg, I. E., Braymer
Goodson, William H., Liberty
Grimes, M. E., St. Joseph
Hodge, Robert N., North Kansas City
Howell, B. D., Brookfield
Ide, Lucien W., St. Joseph
Jackson, W. R., Maryville
Knepper, Paul A., St. Joseph
McArtor, T. R., Browning
McCracken, S. R., Excelsior Springs
Matteson, Frank B., Grant City
Mullinax, Orr, St. Joseph
Nelson, Fred L., St. Joseph
Nixon, Edward E., Gallatin
Petersen, H. E., St. Joseph

Platz, John H., Carrollton
Potter, Thompson E., St. Joseph
Redmond, William, St. Joseph
Roberts, L. Marvin, North Kansas City
Robinson, John A., Edgerton
Rost, Wm. B., St. Joseph
Schroeder, Sydney O., Liberty
Smith, Robert W., Marceline
Spalding, W. B., Plattsburg
Sweiger, J. H., Maysville
Vandiver, V. D., Chillicothe
Wadlow, Ernest E., St. Joseph
Wempe, G. R., Maryville
Willoughby, James, Liberty
Willumsen, H. C., St. Joseph
Wilson, Fred K., Winston

Second Councilor District—13

Davis, Landis Y., Canton
Dreyer, P. V., Huntsville
Eggleston, Donald E., Macon
English, Milton T., Jr., Kirksville
Fleming, Thomas S., Moberly
Fleming, J. Will, Jr., Moberly
Francka, W. F., Hannibal
Hawkins, G. W., Salisbury
Kibbe, John H., Monroe City
Lanning, Robert J., Hannibal
Murphy, Bernard L., Hannibal
Rice, Grover C., Brunswick
Wimp, J. J., Kirksville

Third Councilor District—63

Allen, Hollis N., St. Louis
Allen, Henry C., Clayton
Bassett, R. B., St. Louis
Benjamin, Durand, St. Louis
Block, Arnold S., St. Louis
Bradley, F. R., St. Louis
Byrne, John E., St. Louis
Cannon, Edward M., St. Louis
Carroll, George A., St. Louis
Cutler, Harold M., St. Louis
Drey, Norman W., St. Louis
Earp, Ralph K., St. Louis
Eberle, John P., St. Louis
Feinstein, Leon A., St. Louis
Flance, I. J., St. Louis
Ford, Lee T., St. Louis
Friedman, Bernard, St. Louis
Fries, Armand D., St. Louis
Furlow, Leonard T., St. Louis
Hawkins, George L., Jr., Webster Groves
Hobart, Carl, St. Louis
Hofstatter, Leopold, St. Louis
Jones, Otey S., St. Louis
Keller, Louis, Clayton
Kelley, Robert W., St. Louis
Kerr, David N., Clayton
Kinsella, Ralph, St. Louis
Klein, Harry A., St. Louis
Kohler, Louis H., St. Louis
Lawrence, George H., St. Louis
Lieb, Francis X., St. Louis
Lottes, J. Otto, St. Louis
Macon, Wm. L., Jr., St. Louis
Max, Paul F., St. Louis
Michael, Kenneth D., St. Louis
Mueller, Robert, St. Louis
Muether, R. O., St. Louis
Murphy, Paul, St. Louis
Neilson, Arthur W., St. Louis
Norton, Wm. H., St. Louis
Olmsted, Wm. H., St. Louis
Oppenheimer, Henry E., Clayton
Peden, Joseph C., St. Louis
Repetto, Albert, St. Louis
Ryan, Robert E., St. Louis
Sauer, Dean, St. Louis
Scherman, Victor E., St. Louis
Shapleigh, John B., St. Louis
Sherwin, Charles S., St. Louis
Signorelli, A. J., St. Louis
Smith, Benjamin F., Clayton
Thoma, George E., St. Louis
Thompson, J. W., St. Louis
Tichenor, Robert W., Sappington
Tucker, Eugene F., St. Louis
Vermillion, C. O., St. Louis
Vitt, Edwin F., St. Louis
Vohs, Carl F., St. Louis
Weiss, Richard S., Clayton
Wiegand, Herbert C., St. Louis
Wilucki, Melvin R., St. Louis
Wilucki, Leo E., St. Louis
Zingale, Frank, St. Louis

Fourth Councilor District—35

Backlar, Joseph, University City
Bailey, W. H., St. Louis County
Bernard, Harvey R., St. Louis
Cowdry, E. V., Jr., Clayton
Creech, J. C., Troy
Crider, Russell J., St. Charles
Damron, E. O., Ellsberry
Dowd, James F., St. Louis County
Drescher, Emmett B., University City
Eber, Carl T., St. Louis
Goldenberg, Sidney, University City
Grundmann, Wm. H., St. Louis County
Hampton, Oscar P., Jr., St. Louis
Howe, Louis F., Brentwood
Kendis, Joseph B., St. Louis County
Kingsland, Robert C., Clayton
Kozal, Frank L., Crystal City
Magness, Guy N., University City
Mayer, Robert A., University City
Mays, Frank G., Washington
Muench, L. O., Washington
O'Connell, John, St. Louis
Pearl, John F., St. Clair
Perry, William D., Brentwood
Poggemeier, William, St. Charles
Roberts, Harold K., Clayton
Rother, Paul H., St. Charles
Schmidt, H. H., Washington
Shepherd, Charles T., St. Louis
Steiner, A. J., St. Louis
Sterling, John, Maplewood
Wepprich, M. S., Washington
Whitener, Paul R., St. Louis
Workman, George M., Hermann
Yoskit, Harry, Festus

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oral hypoglycemic agent

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Trademark, brand of Phenformin

in the management of
mild, moderate and severe diabetes
(juvenile and adult)

Fifth Councilor District—48

Barden, F. W., Jefferson City
Belden, E. A., Jefferson City
Black, Samuel P. W., Columbia
Bloom, William A., Fayette
Brooke, Clement, Columbia
Brukardt, Diane, Columbia
Cassel, William J., Jr., Jefferson City
Chamberlain, Gilbert L., Boonville
Chiasson, E. C., Columbia
Clark, Kendall A., Jefferson City
Cope, James C., Columbia
Davis, Leonard L., Mexico
Duval, Addison M., Jefferson City
Dwyer, Thomas L., Mexico
Flynn, Joseph E., Columbia
Garner, Lynn, Jefferson City
Gunn, Jack, Versailles
Gurnee, Landon H., Jefferson City
Hall, John R.,Ashland
Hardwicke, H. M. Jefferson City
Kallenbach, Glen P., Mexico
Keown, Kenneth, Columbia
Kibbe, Edgar A., California
Lankford, Harold D., Mexico
Lodwick, Gwilym, Columbia
McHaney, John W., Jefferson City
Martt, Jack M., Columbia
Matthews, John I., Jefferson City
Meinershagen, C. W., Jefferson City
Miller, LeRoy J., Columbia
Neal, M. Pinson, Columbia
Overholser, M. D., Columbia
Perna, Vincent P., Columbia
Ray, C. Thorpe, Columbia
Ritterbusch, James K., Fulton
Rodes, Ned D., Mexico
Sandy, Charles, Prairie Village, Kans.
Schewe, E. J., Columbia
Shull, G. Donald, Jefferson City
Stauffer, H. B., Jefferson City
Stephenson, H. E., Jr., Columbia
Stewart, William J., Columbia
Stine, Dan G., Columbia
Stuart, Byron M., Boonville
Tanner, Robert H., Jefferson City
Washburn, J. Loren, Versailles
Watts, Byron E., Jefferson City
Wayland, Thomas A., Camdenton

Sixth Councilor District—34

Aiken, G. A., Marshall
Barger, O. B., Harrisonville
Campbell, Albert J., Sedalia
Cope, Joseph S., Lexington
Cooper, R. Lee, Warrensburg
Crozier, F. A., Richmond
Davault, George, Richmond
Ellis, Coburn H., Garden City
Fisher, Stanley D., Sedalia
Gonser, Karl B., Sedalia
Hansen, A. L., Butler
Haynes, R. C., Marshall
Hopkins, Thomas J., Sedalia
Johnson, C. S., Warrensburg
Jones, Edward S., Harrisonville
Kelling, Jordan, Waverly
Lawrence, John R., Marshall
Lederer, C. M., Warrensburg
Lowe, A. L., Sedalia
Lusk, Charles A., Jr., Butler
Luter, Carter W., Butler
McBurney, C. A., Slater
Magee, R. L., El Dorado Springs
Osborne, Charles D., Sedalia
Pearse, Roy W., Nevada
Richter, William B., Stockton
Roberts, Paul A., Sweet Springs
Siegel, Carl D., Sedalia
Stauffacher, C. G., Sedalia
Thurber, Claude M., Windsor
Tracy, Herbert A., Belton
Walker, George S., Clinton
Worley, Charles A., Sweet Springs
Wray, Rolla B., Nevada

Seventh Councilor District—149

Ahlefeld, Charles B., Kansas City
Allen, William B., Kansas City
Andrews, B. W., Kansas City
Arms, Arnold V., Kansas City
Asher, A. Graham, Kansas City
Atcheson, Bellfield, Kansas City
Atwell, Floyd C., Kansas City
Barnett, Gordon P., Kansas City
Bennett, James D., Kansas City
Benoit, Hector W., Jr., Kansas City
Bergmann, V. H., Kansas City
Bernreiter, Michael, Kansas City
Berry, Maxwell G., Kansas City
Boone, Daniel C., Kansas City
Boughnou, H. P., Kansas City
Bowser, John F., Kansas City
Boutros, Amin, Kansas City
Brams, Jack B., Kansas City
Brumm, L. W., Kansas City
Bruner, Robert E., Kansas City
Buhler, Victor B., Kansas City
Buckner, Robert C., Kansas City
Caldwell, John K., Kansas City
Campbell, Frederick B., Kansas City
Campbell, John G., Kansas City
Carlson, Hjalmar, Kansas City
Castles, John E., Kansas City
Chasson, Albert L., Kansas City
Clasen, Arthur C., Kansas City
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Williams, John W., Oak Grove
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Williams, Luke E., Kansas City
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Cohle, Richard R., Carthage
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McCallum, A. J. C., Aurora
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Macdonnell, T. M., Marshfield
Maples, F. H., Mt. Vernon
Napper, Marvin L., Springfield
Newman, Mary, Cassville
Papp, Sandor D., Joplin
Penninger, Wm. H., Springfield
Peterson, Stanley S., Springfield
Polk, John W., Springfield
Royce, J. J., Noel
Schulte, G. A., Joplin
Schwartz, E. J., Springfield
Scorse, Sidney W., Joplin
Sewell, Walter S., Springfield
Siceluff, J. G., Springfield
Simpson, E. L., Springfield
Smith, Harvey S., Springfield
Taylor, Elmer W., Lockwood
Treadgill, J. M., Forsyth
Tillman, W. W., Springfield
Whitehead, F. F., Neosho
Whitten, M. Foster, Carthage
Wommack, Fred L., Crane
Wood, George H., Carthage
Young, C. C., Joplin

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Burns, T. J., Houston
Callihan, C. F., West Plains
Carrington, H. W., Lebanon
Cooper, Claude W., Thayer
Hope, James L., Lebanon
Russell, Barbara E., Rolla
Smith, Rollin H., West Plains
Summers, J. H., Lebanon

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Biggs, Fred J., Poplar Bluff
Bull, Ben M., Ironton
Chandler, O. B., New Madrid
Cline, H. H., Piedmont
English, W. D., Cardwell
Finney, W. O., Chaffee
Roebber, Harry M., Bonne Terre
Sarno, Samuel M., Sikeston
Tygett, Glenn J., Cape Girardeau

Guest Speakers—8

Becker, Lucille C., R.N., Jefferson City
Growdon, J. H., Little Rock, Ark.
Helwig, F. C., Kansas City, Mo.
Holly, Roy G., Omaha, Nebr.
Milliken, Clark H., Rochester, Minn.
Ochsner, Alton, New Orleans, La.
Paul, Lester W., Madison, Wisc.
Wollaeger, E. E., Rochester, Minn.

Guest Physicians—29

Benton, Jay S., Kansas City
Buesseler, John A., Columbia, Mo.
Bunch, C. Pardue, New Mexico
Duffy, Gerald A., Springfield, Colo.
Hausheer, Herman J., Kansas City
Hinrichs, E. J., Wahoo, Nebr.
Krumbiegel, Stanley E., Kansas City
Latimer, Walter N. A., Kansas City
McAllaster, Wendale E., Kansas City
Mason, Lorne W., Evanston, Ill.
Mastro, Edward, Kansas City
Mayes, Gordon, Kansas City
Morley, Fred H., Kansas City
Queen, Dan M., Austin, Tex.
Rodgers, George H., Kansas City
Rossberg, Raymond A., Morris, Minn.
Samson, Ralph B., Columbus, Ohio
Sanders, J. S., Columbia
Sarvothama, P., Kansas City
Shaw, Gordon, Mexico
Siemsen, Gerald, Kansas City
Sinning, John E., Marshalltown, Ia.
Sparks, Dale B., Columbia
Stribling, T. L., Kansas City
Teoscher, Wm. P., Westport, Conn.
Welch, E. E., San Antonio, Tex.
Wells, John P., Sedalia
Wilson, Frank E., Washington, D. C.
Zouch, Adam E., Omaha, Nebr.

There were registered 143 exhibitors, 125 Woman's Auxiliary, 126 medical technicians, 33 guests and 495 physicians. Total registration 922.

BOOK REVIEWS

PSYCHOSOMATIC MEDICINE, A CLINICAL STUDY OF PSYCHOPHYSIOLOGIC REACTIONS, by Edward Weiss, M.D., Professor of Clinical Medicine, Temple University Medical Center, Philadelphia; and O. Spurgeon English, M.D., Professor and Head of Department of Psychiatry, Temple University Medical Center, Philadelphia. Third Edition.

W. B. Saunders Company, Philadelphia, London, 1957. Price $10.50.

This is the third edition of a well known general text on psychosomatic medicine. Its popularity is attested by its three editions and its translations into several foreign languages.

The authors, one an internist and the other a psychiatrist, interpret the term psychosomatic medicine in its broadest sense. They discuss topics ranging from anxiety states to sexual impotence, as well as the more classical psychosomatic diseases as peptic ulcer, bronchial asthma and ulcerative colitis. Numerous brief case histories are interspersed throughout the text, and the book is well written and easily read. Technics of psychosomatic history taking and the various psychotherapeutic approaches are discussed in some detail.

The defects of the book are those which are inevitable in a fairly comprehensive textbook of a relatively new field. Much research is cited without critical evaluation of its validity. Diabetes mellitus, for example, is discussed in such a manner as might lead to the impression that it is generally considered to be emotionally caused; such a point of view is held by few internists or psychiatrists. Many other topics are covered in a superficial manner which leaves the impression that they are simple in nature and easy to treat, whereas this is often not the case.

The book is a generally useful one, however, and is to be recommended to the internist, the general practitioner or surgeon who seeks a general text on psychosomatic medicine. It is quite readable and does not indulge in the technical psychiatric jargon which often discourages the physician from further reading in psychosomatic works. The psychiatrist will find it useful as a general reference book on psychosomatic medicine and its bibliographies on the various topics are comprehensive and well chosen. A.H.C.

Psychopathic Personalities, by Harold Palmer, M.D. Philosophical Library, New York, 1957. Price $4.75.

Dr. Palmer has produced an interesting and rather comprehensive review of certain important psychiatric syndromes aimed primarily toward a non-psychiatric audience. The title is somewhat misleading since it would imply a major consideration of the basic characteriologic disorders which one is want to consider under the term psychopathic personalities. His initial chapter does cover this but the reminder of the book deals with such clinical areas as schizophrenia, depressive states, obsessions, hysterias, epilepsies, tension syndromes, paranoid states and "mania."

As Dr. Palmer himself says, "My main purpose has been to achieve a mode of presentation of psychiatry acceptable to workers in other disciplines including those concerned with the management of human beings." I would categorize his viewpoint as being basically psychobiologic in the broadest Myerian sense. He attributes his main inspiration, however, to the writing of William James and Sigmund Freud. Generally his style is entertaining, informative and readable, although at times his way of expression may be difficult for most American readers. As an example, in speaking about schizophrenia, "Perhaps one may speak of an incoordination or personality all awry which augurs ill."

To some, however, this may add to their interest in the book and throughout one encounters a broad cultural and extensive clinical knowledge which Dr. Palmer sprinkles effectively throughout the book. In places the book is somewhat out of date, particularly when he considers the area of physiologic treatment of psychoses. This is quite excusable, however, when we consider the fact this book must have been written two to three years ago at a time when the most recent advances in physiological treatments were still much in the exploratory stages.

In summary, this book will constitute an enjoyable and useful experience. To the practicing psychiatrist or general physician who has read rather extensively in psychologic areas, much that is presented will appear somewhat "old hat." It is not designed as a textbook, and for students and others reading primarily for up-to-date knowledge there are many better presentations. R.H.B.

Cancer and the Atomic Age, by Clement A. Tavares, M.D. Vantage Press, New York, Washington, Chicago and Hollywood. 1958. Price $3.50.

In this book the author endeavors to present his own energy concept, which he defines as his "radiatom theory," as a single etiologic agent for all cancer. He feels that all matter and energy are composed of "radiatoms," which is his term for the ultimate corpuscle or unit of energy, or photon, equal to 6.6×10^{-27} erg.

Radiation, heat, trauma, virus, chemical, theories of cancer causation are discussed and he attempts to interrelate various causes with his concept of cancer stemming from a cell absorbing energy (from "radiatoms" regardless of source) in its nucleoprotein molecules, increasing energy and mass, increasing cellular activity, resulting in greater cell division and cancer.

His concept merits consideration; however, his presentation leaves much to be desired, as a major portion of the context is formulae, charts, tables and statistics used in an effort to establish basis for his theory.

Praiseworthy is his plea for cessation of nuclear testing, due to dangers of radioactive fallout, which he feels is the most powerful carcinogenic agent of all.

The reviewer felt the book was painfully repetitious and the data, charts and tables, poorly correlated to the thread of continuity the author attempted to establish. C.A.T.

CLINICAL OBSTETRICS AND GYNECOLOGY. A quarterly book series. Volume 1, Number 1. Paul B. Hoeber, Inc., Medical Book Department of Harper & Brothers, New York. 1958. Price $18.00 a year.

"Clinical Obstetrics and Gynecology," edited by Allen C. Barnes, M.D., in regard to the management of endocrine problems, and by Curtis J. Lund, M.D., in regard to medical problems in pregnancy, offers a new approach to the transmission of essential material and medical information to the general practitioner and to the specialist.

This book represents the combined efforts on the part of specialists in the fields of obstetrics, gynecology, endocrinology and cardiology, along with experiences from the general practitioner. Each contributor to this book has been chosen for his special clinical knowledge of a particular subject which he has described rather clearly and effectively, as well as how he has handled specific clinical problems in regard to his assigned area.

The list of contributors is quite voluminous and practically all of the individuals involved with medical contributions are well known in their respective fields.

The book is divided, for the purpose of convenience, into two large sections: First, there is a section concerned with medical problems in pregnancy which includes such divisions as a preliminary introduction by Curtis J. Lund, the guest editor; then followed, in separate chapter divisions, by a group of discussions including: anemia in pregnancy; pregnancy and heart disease; pregnancy and diabetes; disease of the adrenal glands associated with pregnancy; thyroid gland and pregnancy; pregnancy and virile hepatitis; urinary tract infections; tuberculosis; obstetrical management of poliomyelitis complicating pregnancy; and finally, multiple sclerosis, as related to pregnancy.

The second portion of the book devotes itself to the management of endocrine problems with Allen C. Barnes, M.D., as the guest editor. This portion includes such items as discussions concerning diagnostic aids, the problems related to menstrual function, dysfunctional uterine bleeding, dysmenorrhea, and the menopause. Then, in a separate subdivision, the following are discussed: problems related to pregnancy and the purer perium, such as the endocrine treatment of sterility, threatened and habitual abortion, the management of diabetes in pregnancy, and disturbances of lactation.

The third division handles problems related to growth and sexual development, including such subjects as the adreno-genital syndrome and adrenal hyperplasia and precocious and delayed sexual development.

The individual contributors have defined their specific specialties in their various chapters quite well, and at the conclusion of each chapter there is an adequate bibliography present.

This is a well-presented book; the information appears to be quite specific and dogmatic, which is of a great boon to the practitioner.

The publisher states that this represents only a part of the program to be carried out, inasmuch as they propose to submit four issues of "Clinical Obstetrics and Gynecology" per year. A.E.U.

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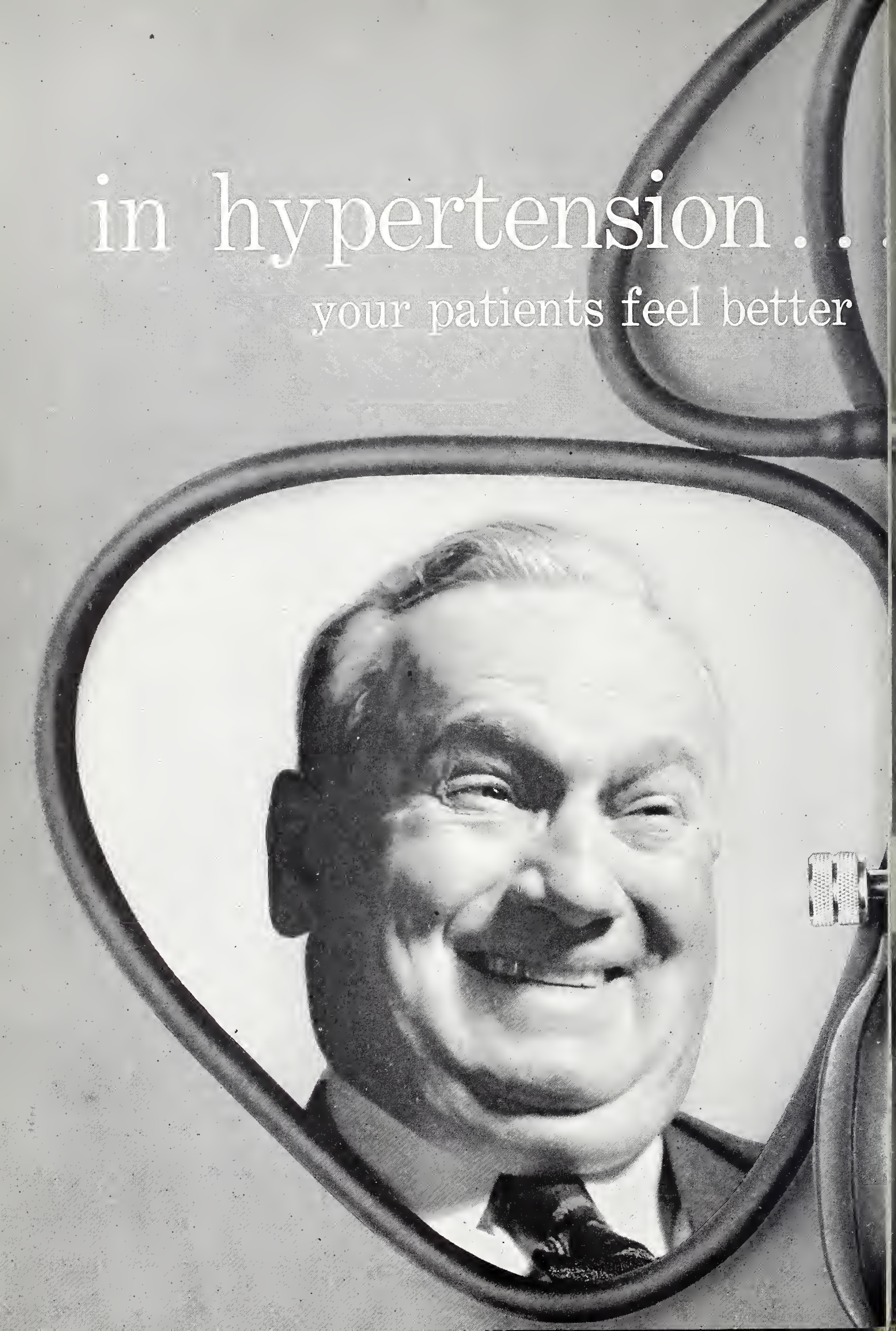
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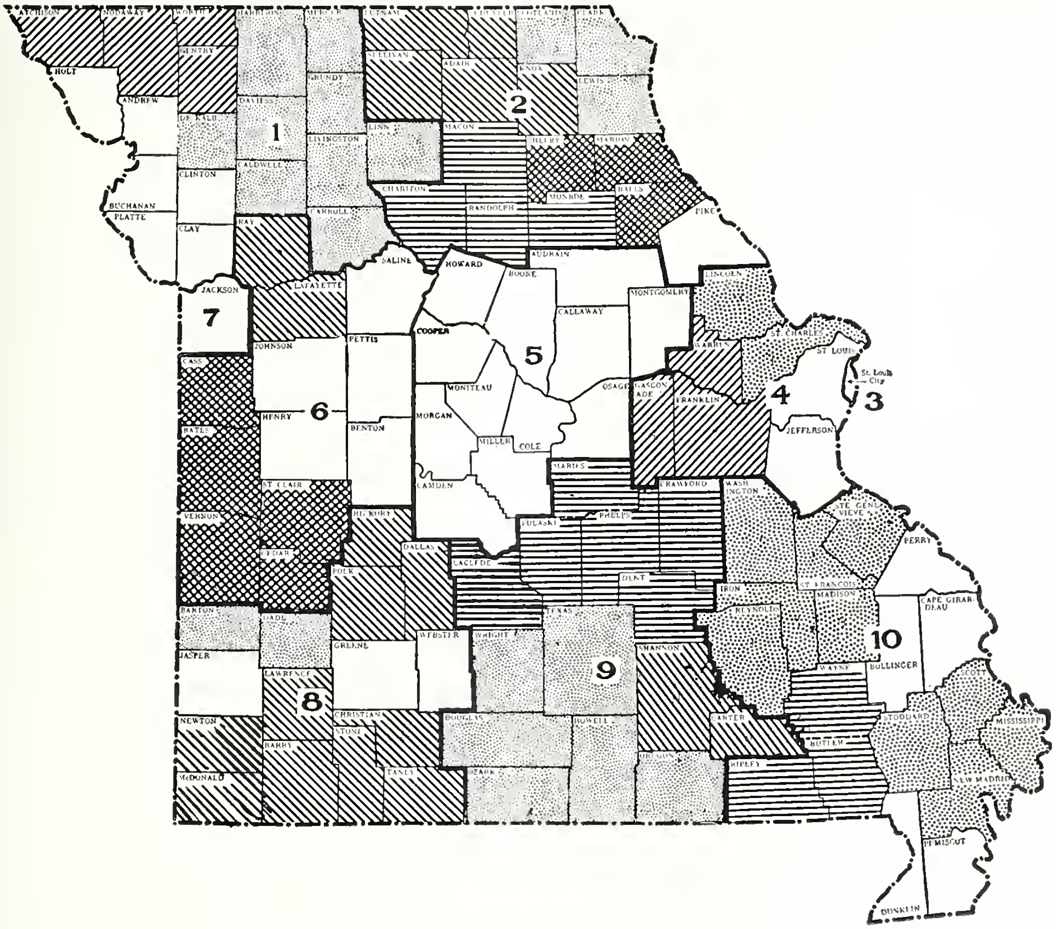
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Shaded areas show hyphenated component societies. Counties listed in italics are unorganized.

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Component Societies in Affiliation With the Missouri State Medical Association

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Benton	6	T. S. Reser	Cole Camp	James A. Logan	Warsaw
Boone	5	Leroy Miller	Columbia	Joseph E. Flynn	Columbia
Buchanan	1	George W. Forman	St. Joseph	William B. Rost	St. Joseph
Butler-Ripley-Wayne	10	T. E. Ruff	Poplar Bluff	E. T. Hansbrough	Poplar Bluff
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Cooper	5	Vernon D. Friedrichs	Pilot Grove	T. C. Beckett	Boonville
Dallas-Hickory-Polk	8	D. C. McCraw	Bolivar	C. H. Barnett	Bolivar
Dunklin	10	Leo J. Benson, Jr.	Kennett	E. L. Spence	Kennett
Franklin-Gasconade-Warren	4	Paul A. Brenner	Owensville	William Richardson	Union
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Howard	5	W. C. Allen	Glasgow	W. A. Bloom	Fayette
Jackson	7	Harold L. Gainey	Kansas City	Edward G. Kettner	Kansas City
Jasper	8	Irwin T. Craig	Joplin	David Allen	Joplin
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Lincoln-St. Charles	4	E. O. Damron	Elsberry	P. H. Rother	St. Charles
Marion-Ralls-Shelby	2	Julius Well	Palmyra	J. H. Walterscheid	Hannibal
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Miller	5	W. L. Allee	Eldon	Carl T. Buehler	Eldon
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North Central Counties Medical Society (Adair-Schuyler-Knox-Sullivan-Putnam)	2	Spencer L. Freeman	Kirksville	Paul E. Hilton	Kirksville
Ozarks Medical Society (Barry-Lawrence-Stone-Christian-Taney-Newton-McDonald)	8	Leo T. Taylor	Neosho	A. J. Graves	Mount Vernon
Pemiscot	10	P. J. Aquino	Caruthersville	John K. Duckworth	Hayti
Perry	10	Stanley Legner	Perryville	A. E. McDermott	Perryville
Pettis	6	Thomas J. Hopkins	Sedalia	R. H. Stewart	Sedalia
Pike	2	Charles H. Lewellen	Louisiana	Roger F. Christensen	Louisiana
Platte	1	H. Graham Parker	Platte City	H. C. Thurman	Parkville
St. Louis City	3	Robert B. Bassett	St. Louis	Charles S. Sherwin	St. Louis
St. Louis	4	Robert Kingsland	Clayton	B. Todd Forsyth	St. Louis
Saline	6	E. Lee McCorkle	Marshall	M. E. Roehrs	Marshall
Semo County Medical Society (Stoddard-New Madrid-Mississippi-Scott)	10	John Dernoncourt	Charleston	Thelma C. Buckthorpe	Sikeston
South Central Counties Medical Society (Howell-Oregon-Texas-Wright-Douglas-Ozark)	9	J. L. Spears	Cabool	Rollin H. Smith	West Plains
Webster	8	C. R. Macdonnell	Marshfield	E. G. Beers	Seymour
West Central Missouri Medical Society (Bates-Cass-Cedar-St. Clair-Vernon	6	John M. Cooper	Butler	J. C. Moody	Harrisonville

Towns and Counties

A

Adrian, Bates County
Affton, St. Louis County*
Albany, Gentry County
Altenburg, Perry County
Appleton City, St. Clair County
Ashland, Boone County
Aurora, Lawrence County
Ava, Douglas County

B

Bakersfield, Ozark County
Ballwin, St. Louis County*
Barnard, Nodaway County
Belton, Cass County
Berkeley, St. Louis County*
Bethany, Harrison County
Bloomfield, Stoddard County
Blue Springs, Jackson County
Bolivar, Polk County
Bonne Terre, St. Francois County
Boonville, Cooper County
Bourbon, Crawford County
Bowling Green, Pike County
Branson, Taney County
Braymer, Caldwell County
Brentwood, St. Louis County*
Bridgeton, St. Louis County*
Brookfield, Linn County
Browning, Linn County
Brunswick, Chariton County
Buffalo, Dallas County
Butler, Bates County

C

Cabool, Texas County
Cainsville, Harrison County
California, Moniteau County
Cameron, Clinton County
Campbell, Dunklin County
Canton, Lewis County
Cape Girardeau, Cape Girardeau County
Cardwell, Dunklin County
Carl Junction, Jasper County
Carrollton, Carroll County
Carthage, Jasper County
Caruthersville, Pemiscot County
Cassville, Barry County
Centralia, Boone County
Chaffee, Scott County
Charleston, Mississippi County
Chesterfield, St. Louis County*
Chillicothe, Livingston County
Clayton, St. Louis County*
Clinton, Henry County
Coatsville, Schuyler County
Cole Camp, Benton County
Columbia, Boone County
Concordia, Lafayette County
Conway, Laclede County
Crane, Stone County
Creve Coeur, St. Louis County*
Crystal City, Jefferson County
Cuba, Crawford County

D

Desloge, St. Francois County
DeSoto, Jefferson County
Dexter, Stoddard County
Doniphan, Ripley County
Drexel, Cass County

E

East Prairie, Mississippi County
Edgerton, Platte County
Edina, Knox County
Eldon, Miller County
El Dorado Springs, Cedar County
Elsberry, Lincoln County
Eureka, St. Louis County*
Everton, Jackson County
Excelsior Springs, Clay County

F

Farmington, St. Francois County
Faucett, Buchanan County
Fayette, Howard County
Fenton, St. Louis County*
Ferguson, St. Louis County*
Festus, Jefferson County
Fillmore, Andrew County
Flat River, St. Francois County
Florissant, St. Louis County*
Forsyth, Taney County
Fort Leonard Wood, Phelps County
Fredericktown, Madison County
Frontenac, St. Louis County*
Fulton, Callaway County

G

Gallatin, Daviess County
Garden City, Cass County
Gashland, Clay County
Gideon, New Madrid County
Glasgow, Howard County
Glendale, St. Louis County*
Gordonville, Cape Girardeau County
Grandview, Jackson County
Grant City, Worth County
Gravois Mills, Jackson County
Greenfield, Dade County
Green Ridge, Pettis County

H

Hamilton, Caldwell County
Hannibal, Marion County
Harrisonville, Cass County
Hartville, Wright County
Hayti, Pemiscot County
Herculaneum, Jefferson County
Hermann, Gasconade County
Hickman Mills, Jackson County
Higginsville, Lafayette County
Hillsboro, Jefferson County
Holden, Johnson County
Hopkins, Nodaway County
Hornersville, Dunklin County
Houston, Texas County
Houstonia, Pettis County
Humansville, Polk County
Hume, Bates County
Huntsville, Randolph County

I

Iantha, Barton County
Independence, Jackson County
Ironton, Iron County

J

Jackson, Cape Girardeau County
Jefferson Barracks, St. Louis County*
Jefferson City, Cole County
Jennings, St. Louis County*
Joplin, Jasper County

K

Kahoka, Clark County
Kansas City, Jackson County
Kennett, Dunklin County
Keytesville, Chariton County
Kimmswick, Jefferson County
King City, Gentry County
Kirksville, Adair County
Kirkwood, St. Louis County*
Knob Noster, Johnson County
Koch, St. Louis County*

L

Ladue, St. Louis County*
La Grange, Lewis County
Lakeview Heights, Benton County
Lamar, Barton County
La Monte, Pettis County
Lawson, Ray County
Leadwood, St. Francois County
Leasburg, Crawford County
Lebanon, Laclede County
Lee's Summit, Jackson County
Lemay, St. Louis County*
Lexington, Lafayette County
Liberty, Clay County
Licking, Texas County
Lilbourn, New Madrid County
Lockwood, Dade County
Louisiana, Pike County

M

Macon, Macon County
Malden, Dunklin County
Maplewood, St. Louis County*
Marceline, Linn County
Marshall, Saline County
Marshfield, Webster County
Marthasville, Warren County
Martin City, Jackson County
Maryville, Nodaway County
Maysville, De Kalb County
Mexico, Audrain County
Miami, Saline County
Middletown, Montgomery County
Milan, Sullivan County
Miller, Lawrence County
Moberly, Randolph County
Monett, Barry County
Monroe City, Monroe County
Montgomery City, Montgomery County
Morehouse, New Madrid County
Morrisville, Polk County
Mound City, Holt County
Mountain Grove, Wright County
Mountain View, Howell County
Mount Vernon, Lawrence County

N

Neosho, Newton County
Nevada, Vernon County
New Bloomfield, Callaway County
Newburg, Phelps County
New Florence, Montgomery County
New Haven, Flanklin County
New Madrid, New Madrid County
Noel, McDonald County
Norborne, Carroll County
Normandy, St. Louis County*
North Kansas City, Clay County

O

Oak Grove, Jackson County
Odessa, Lafayette County
O'Fallon, St. Charles County
Olivette, St. Louis County*
Oran, Scott County
Oregon, Holt County
Osceola, St. Clair County
Overland, St. Louis County*
Owensville, Gasconade County
Ozark, Christian County

P

Pacific, Franklin County
Palmyra, Marion County
Paris, Monroe County
Parkville, Platte County
Parma, New Madrid County
Pattonville, St. Louis County*
Perryville, Perry County
Piedmont, Wayne County
Pine Lawn, St. Louis County*
Platte City, Platte County
Plattsburg, Clinton County
Pleasant Hill, Cass County
Poplar Bluff, Butler County
Portageville, New Madrid County
Potosi, Washington County
Princeton, Mercer County

R

Raytown, Jackson County
Reeds, Jasper County
Reeds Spring, Stone County
Republic, Greene County
Rich Hill, Bates County
Richmond, Ray County
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Ridgeway, Harrison County
Robertson, St. Louis County*
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Rolla, Phelps County
Rosendale, Andrew County

S

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St. Clair, Franklin County
Ste. Genevieve, Ste. Genevieve County
St. James, Phelps County
St. Joseph, Buchanan County
St. Louis City*
St. Marys, Ste. Genevieve County
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Sedgewickville, Bollinger County
Senath, Dunklin County
Seymour, Webster County

Shelbina, Shelby County
Shelbyville, Shelby County
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Sikeston, Scott County
Silex, Lincoln County
Slater, Saline County
Smithton, Pettis County
Smithville, Clay County
Springfield, Greene County
Stanberry, Gentry County
Steele, Pemiscot County
Steelville, Crawford County
Stockton, Cedar County
Strafford, Greene County
Strasburg, Cass County
Sullivan, Franklin County
Sweet Springs, Saline County

T

Tarkio, Atchison County
Thayer, Oregon County
Tipton, Moniteau County
Trenton, Grundy County
Troy, Lincoln County

U

Union, Franklin County
Unionville, Putnam County
University City, St. Louis County*

V

Valley Park, St. Louis County*
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Versailles, Morgan County

W

Walnut Grove, Greene County
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Warrensburg, Johnson County
Warrenton, Warren County
Warsaw, Benton County
Washington, Franklin County
Waverly, Lafayette County
Waynesville, Pulaski County
Webb City, Jasper County
Webster Groves, St. Louis County*
Wellsville, Montgomery County
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Weston, Platte County
West Plains, Howell County
Willow Springs, Howell County
Windsor, Henry County
Winona, Shannon County
Winston, Daviess County

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* May belong to St. Louis County or to St. Louis Medical Society.

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Aiken, George A., Marshall
Aiken, Richard F., Marshall
Aisenstadt, E. Albert, Kansas City
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Allen, James R., Rock Port
Allen, Jerry H., Springfield
Allen, Joseph E., Columbia
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Allen, William C., Glasgow
Allen, William E., Jr., St. Louis
Allen, William H., Nevada
Allen, William H., Jr., Hume
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Azzouni, J. N., St. Louis

B

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Barker, Jesse W., St. Louis
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Barnes, Charles R., St. Louis
Barnes, Raymond F., Webster Groves
Barnes, Robert H., Kansas City
Barnes, Seth S., Cape Girardeau
Barnett, Charles H., Bolivar
Barnett, Floyd A., Paris
Barnett, Gordon P., Kansas City
Barnett, Julian H., Kirkwood
Barnett, Norman H., Joplin
Baron, William, St. Louis
Barone, Paul L., Nevada
Barrett, Scott R., St. Louis
Barrow, Jack, Ladue
Barry, Gerald W., Kansas City
Barry, John W., Kansas City
Barry, William B., Kansas City
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Bartlett, Robert W., St. Louis
Bartlett, Willard, Jr., St. Louis
Bartnick, Mitchel L., St. Louis
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Bass, Billy J., Salem
Bassett, Robert B., St. Louis
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Bauer, John D., St. Louis
Bauer, Joseph A., St. Louis
Bauer, Maria, Granite City, Ill.
(Member St. Louis Medical Society)
Bauer, Otto, Granite City, Ill.
(Member St. Louis Medical Society)
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Bauman, Henry C., Maryville
Baumann, A. R., Steelville
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Bealer, Louis A., Centralia
Beam, Sim F., St. Louis
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Beasley, L. Kenneth, St. Louis
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Beck, Paul M., St. Joseph
Becke, William G., St. Louis
Beckemeyer, W. Albert, Sedalia
Becker, Bernard, St. Louis
Becker, Edward J., St. Louis
Becker, George H., St. Louis
Becker, Richard R., Kansas City
Becker, Stanley C., St. Louis
Beckett, Theodore C., Boonville
Beckette, Edmund S., St. Louis
Beckman, Donald E., Clarksville
Beckman, Paul H., Houston
Beckman, William, Strasburg
Bee, James E., Kansas City
Beecher, Sheldon B., Poplar Bluff
Beers, Ellsworth G., Seymour
Behrens, Donald T., Richmond Heights
Belden, Edgar A., Jefferson City
Belinson, Louis, Jefferson City
Bell, Charles T., Maryville
Bell, Robert M., St. Louis
Bell, William F., Lee's Summit
Belot, Monti L., Parkville
Belsey, Wallace A., Campbell
Benincasa, Anthony V., St. Louis
Benjamin, Durand, St. Louis
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Bennett, Joseph D., Branson
Bennett, Thomas T., St. Louis
Benoit, Hector W., Jr., Kansas City
Benson, Leo J., Jr., Kennett
Benson, Scott C., St. Joseph
Berard, Louis N., St. Louis
Berenson, Sheldon E., Kansas City
Berg, Leonard, St. Louis
Berg, Ralph, St. Louis
Berger, Edward J., St. Louis
Bergman, Hugo F., St. Louis
Bergmann, Martin, St. Louis
Bergmann, Victor H., Kansas City
Bergner, Grace E., St. Louis
Berland, Harry I., St. Louis
Berman, Joseph P., St. Louis
Berman, William, St. Louis
Bernard, Harvey R., St. Louis
Berndsen, Gerard H., St. Louis
Berney, Francis J., St. Joseph
Bernreiter, Michael, Kansas City
Bernstein, Aaron M., St. Louis
Bernstorff, Paul H., St. Louis
Berry, Guy N., Kansas City
Berry, John W., St. Louis
Berry, Maxwell G., Kansas City
Berry, Paul T., Troy
Bersche, Bertram L., St. Louis
Berwald, Irwin I., St. Louis
Bess, William E., Sedalia
Best, Robert, Higginsville
Bettonville, Paul J., Jr., St. Louis
Bickel, Vern T., Lamar
Bickford, Wallace M., Miami, Fla.
(Member Saline County)
Biggs, Fred J., Jr., Poplar Bluff
Biggs, Harry L., Raytown
Biggs, James B., Bowling Green
Bikales, Victor W., Kansas City
Bills, Marvin L., Kansas City
Bilsky, Nathan, St. Louis
Bindbeutel, Arthur H., St. Louis
Bindbeutel, D. A., Webster Groves
Binder, Morton A., St. Louis
Bing, Richard J., St. Louis
Bircher, John L., St. Louis
Birdsall, Thomas C., St. Louis
Birenbaum, Aaron, St. Louis
Birney, William P., Hannibal
Birsner, Frank H., Carthage
Birsner, Louis J., St. Louis
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Bishop, Mary McF., Ferguson
Bisno, Daniel, St. Louis
Bivings, F. Gary, Columbia
Blache, J. Owen, St. Louis
Black, Don A., Kansas City
Black, Eugene C., Kansas City
Black, James M., St. Louis
Black, Mervin H., Joplin
Black, Samuel P. W., Columbia
Blacklock, David E., King City
Blackman, Nathan, Kirkwood
Blackmore, Thomas A., Windsor
Blackwell, Charles W., Platte City
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Blalock, William N., St. Louis
Bland, Warren W., Vandalia
Blanke, Otto T., Joplin
Blankenship, Dale M., Ballwin
Blankenship, George W., Neosho
Blaylock, Richard D., Jackson
Blaylock, Robert W., Marshall
Bleyer, Adrien S., St. Louis
Blim, Richard D., Kansas City

Block, Arnold S., St. Louis
Bloom, W. A., Fayette
Boch, Lysle M., Hannibal
Bock, Lux H., St. Louis
Bockelman, Clifford H., St. Louis
Boedeker, Roy V., St. Louis
Boemer, Lilburn C., St. Louis
Boger, James W., Sedalia
Boggs, Roy E., St. Louis
Bohne, William R., St. Louis
Bohnsack, Ralph W., Brookfield
Bohrer, Harry C., St. Louis
Boldizar, Albert G., St. Louis
Boldt, Thomas H., St. Louis
Boles, Clifford R., Clayton
Boley, James O., Kansas City
Bolgar, Bertalam, Festus
Bolin, N. Venay, Kansas City
Bolinske, Robert E., Clayton
Bolner, Anne U., Huntsville, Ala.
(Member Boone County)
Bond, Leslie F., St. Louis
Bondurant, Bryce H., St. Louis
Bonebrake, MacDonald, Springfield
Bonfanti, Albert L., St. Louis
Bonney, Samuel C., St. James
Boody, Robert J., Kansas City
Boone, Daniel S., Kansas City
Booth, Herbert R., Hamilton
Border, Charles T., Garland, Tex.
(Member Jackson County)
Bordy, Marvin D., Kansas City
Borenstine, Joseph, Kansas City
Bortnick, Arthur R., St. Louis
Boteler, George M., St. Joseph
Boughnou, Harvey P., Kansas City
Bourke, Timothy S., Kansas City
Boutros, Amin, Kansas City
Bowdern, Edward H., St. Louis
Bowdish, Palmer R., Marshall
Bowe, Edwin E., Jefferson City
Bowerman, Harold H., Clayton
Bowersox, Warren A., St. Louis
Bowles, Richard P., Liberty
Bowman, Melvin C., Neosho
Bowser, John F., Kansas City
Box, Earnest M., Springfield
Boyd, Arthur M., St. Louis
Bozzo, Raymond J., Washington
Bradley, Frank R., St. Louis
Bradley, Richard V., St. Louis
Bradshaw, W. D., Clinton
Brady, Charles H., Sedalia
Brady, Hugh S., Concordia
Brams, Jack B., Kansas City
Brand, Earl L., St. Louis
Brandon, Walter L., Poplar Bluff
Brasher, Ben H., Lexington
Brasher, Charles A., Mt. Vernon
Braufman, Harvey S., St. Louis
Braverman, Abe E., Kansas City
Bredall, Jerome J., Newark, Del.
(Member Perry County)
Breece, Grady L., Jr., Marble Hill
Breid, Jacob, Trenton
Bremser, Harry L., St. Louis
Brennan, George A., St. Louis
Brennan, John A., Farmington
Brennan, Patricia A., St. Louis
Brennan, Raymond J., Chillicothe
Brennan, Robert A., St. Louis
Brennan, Robert V., Kirkwood
Brenner, Paul A., Owensville
Brereton, Robert L., Kirkwood
Breuer, Robert E., Newburg
Brewer, Lake, Ridgeway
Bricker, Eugene M., St. Louis
Bridgens, James G., Independence
Bridges, James R., Kahoka
Brielmaier, Charles R., St. Louis
Briscoe, John R., Maplewood
Bristow, Arthur S., Princeton
Bristow, Robert B., St. Joseph
Brittingham, Thomas E., St. Louis
Brock, Bernard, Windsor
Brockelmann, Erich, St. Louis
Brodeur, Armand E., Kirkwood
Bronson, Shael S., St. Louis
Brooke, Clement E., Columbia
Brookes, Henry S., Jr., St. Louis
Brookes, Robert D., St. Louis
Brookreson, Alton F., Poplar Bluff
Brooks, Arthur C., St. Louis
Brooks, John M., Springfield
Brother, George M., St. Louis
Broun, Goronwy O., St. Louis
Broun, Goronwy O., Jr., St. Louis
Brown, Adrian J., Kansas City
Brown, Alex L., Springfield
Brown, Daniel W., San Diego, Calif.
(Member St. Louis Medical Society)
Brown, E. Eugene, St. Louis
Brown, Eugene R., University City
Brown, Frederick B., Aurora
Brown, Irwin S., Kansas City
Brown, James B., St. Louis
Brown, James T., Springfield
Brown, John J., Fulton
Brown, Lyman D., Springfield
Brown, Robert S., Kansas City
Brown, Seymour, St. Louis
Brown, William R., Kansas City
Brown, William S., St. Louis
Brownfield, Samuel T., Brookfield
Brownsberger, Robert H., Appleton City
Broyles, Glen H., Kansas City
Broyles, Watkins A., Bethany
Bruce, Helen L., St. Louis
Bruce, James G., Jefferson City
Bruce, Leo A., Sikeston
Bruce, Paul C., Liberty
Brukardt, Diane, Columbia
Brumm, Lawrence W., Kansas City
Bruner, Claude R., Columbia
Bruner, Robert E., Kansas City
Bruns, Kenneth, St. Charles
Brust, Carl H., Mission, Kansas
(Member Jackson County)
Bryan, James H., Clayton
Bryan, William H., Jr., Kansas City
Bryan, William T. K., St. Louis
Bryant, William O., Hayti
Buckingham, William, Kansas City
Buckner, Robert C., Kansas City
Buckthorpe, Thelma C., Sikeston
Budd, John J., Jr., St. Louis
Budke, Harold A., Kansas City
Buehler, Carl T., Jr., Eldon
Buehrer, Cletus E., Lawson
Buessler, John A., Columbia
Bugg, Andrew F., Lordsburg, New Mex.
(Member Mineral Area)
Buhler, Victor B., Kansas City
Buie, Bruce R., Hickman Mills
Bulger, Harold A., St. Louis
Bull, Ben M., Ironton
Bumgarner, James E., Columbia
Bumgarner, Roger W., Columbia
Bunting, Williston P., Kansas City
Burch, John E., Joplin
Burek, A. W., Wausau, Wis.
(Member Boone County)
Burford, Cyrus E., St. Louis
Burford, E. Humber, St. Louis
Burford, Thomas H., St. Louis
Burke, Robert J., St. Louis
Burkey, Jordan W., Springfield
Burkhardt, Edward F., St. Louis
Burmeister, R. William, Frederick, Md.
(Member St. Louis Medical Society)
Burney, Wallace S., Miller
Burns, Beryl I., Salt Lake City, Utah
(Member Jackson County)
Burns, Francis J., St. Louis
Burns, Francis R., Hannibal
Burns, Jonathan E., Charles Town, W. Va.
(Member Jackson County)
Burns, Stanley S., St. Louis
Burns, Thomas J., Houston
Burns, Thomas W., Columbia
Burnside, Charles R., Kirkwood
Burst, Donald O., St. Louis
Burstein, Robert, St. Louis
Busch, Anthony K., St. Louis
Busiek, Paul J., Springfield
Busiek, Urban J., Springfield
Bussmann, Donald W., Clayton
Butcher, Harvey R., Jr., St. Louis
Butcher, Robert W., Kansas City
Butler, E. F., St. Joseph
Butterworth, Nelson S., Joplin
Butts, James D., Rolla
Byars, Louis T., St. Louis
Byers, Philip L., Kansas City
Byland, Benjamin F., Maryville
Byland, Samuel J., Wellsville
Byrd, Homer E., Carthage
Byrne, John E., St. Louis

C

Caciolo, Carlo, St. Louis
Cacioppo, Joseph E., St. Louis
Caffrey, Raymond J., Grandview
Cain, Alvin R., Lamar
Cain, Charles F., Caruthersville
Caldwell, Jacob D., Hayti
Caldwell, John K., Kansas City
Calkins, Delevan, St. Louis
Callahan, Donald E., Crestwood
Callaway, Guy D., Springfield
Callaway, Guy D., Jr., Springfield
Callaway, Luther M., Kansas City
Callihan, Charles F., West Plains
Calman, Carl H., St. Louis
Calodney, Martin M., St. Louis
Calovich, Emery R., Kansas City
Calvert, Lewis C., Weston
Camel, H. Marvin, St. Louis
Campbell, Cecil S., St. Louis
Campbell, Edward D., Cape Girardeau
Campbell, Frederick B., Kansas City
Campbell, James E., Macon
Campbell, John G., Kansas City
Campos, Francisco J., St. Louis
Canella, John M., Hannibal
Canepa, Francis J., St. Louis
Canepa, John B., St. Louis
Canlas, Emilio M., Poplar Bluff
Cannon, Edward M., St. Louis
Cannon, William J., St. Louis
Canty, Eugene J., St. Charles
Capetti, Alex P., Crane
Cappel, Powel B., St. Louis
Caravelli, Anthony F., St. Louis
Carbaugh, Glenn C., Kansas City
Carleton, Charles E., Jr., Farmington
Carlin, Albert L., Stanberry
Carlin, M. Richard, St. Louis
Carlisle, John B., Sedalia
Carlson, Arne E., St. John's
Carlson, Hjalmar E., Kansas City
Carmichael, Francis A., Jr., Kansas City
Carney, Joseph E., Jr., St. Louis
Carney, Roscoe P., St. Louis
Carpenter, George T., St. Joseph
Carpenter, George W., Chillicothe
Carpenter, Wallace, Rockport
Carr, Archie D., St. Louis
Carrier, Edson C., Kansas City
Carrington, Howard W., Lebanon
Carroll, George A., St. Louis
Carroll, Grayson, St. Louis
Carroll, Percy J., Clayton
Carroll, Thomas W., Lamar
Carron, Oscar A., Perryville
Carter, Howard, Hamilton
Carter, James R., Neosho
Carter, William W., Clayton
Casady, Gilbert N., Smithville
Casebolt, Buford T., Kansas City
Casebolt, Milton B., Kansas City
Casey, Shederic A., Lebanon
Casford, Ralph S., Kansas City
Cason, Elbert H., St. Louis
Cassel, Melvin A., St. Louis
Cassell, William J., Jr., Jefferson City
Cassidy, Leslie D., St. Louis
Castelaw, Rush E., Kansas City
Castles, John E., Kansas City
Catanzaro, Anthony F., St. Louis
Catanzaro, Francis J., Kirkwood
Catanzaro, Rudolph E., St. Louis
Cavaness, Ernest W., Leucadia, Calif.
(Member Jackson County)
Centner, Paul J., Kansas City
Chalkley, Judson I., Columbia
Chamberlain, Gilbert L., Boonville
Chambers, James Q., Jr., Kansas City
Chamness, James T., St. Louis
Chandler, Orville B., New Madrid
Chandler, Robert A., Kansas City
Chapman, Arthur H., Kansas City
Chapman, Jerry R., Steele
Chapman, Samuel B., Kansas City
Charles, Benjamin H., St. Louis
Charles, Cecil M., Clayton
Charnas, Raymond M., St. Louis
Chastain, Maurice W., North Kansas City
Cherre, Anthony J., St. Louis
Cherre, Charles J., St. Louis
Chesney, George W., Joplin
Chiarottino, Joseph F., St. Joseph
Chiasson, E. Chaille, Columbia
Chieffi, Margaret, St. Louis
Chiles, David R., Smithville
Chinsky, Murray, St. Louis
Christ, Martin H., St. Joseph
Christensen, Roger F., Louisiana
Chute, W. Deward, Moberly
Ciampa, Thomas, St. Louis
Ciapciak, Stanley J., St. Louis
Cibis, Paul A., St. Louis
Clancy, James F., St. Louis
Clark, Chester L., Trenton
Clark, Harold B., Kansas City
Clark, Irving H., Hickman Mills
Clark, James F., St. Louis
Clark, Kendall A., Jefferson City
Clarke, Michael J., Springfield
Clary, William F., Springfield
Clasen, Arthur C., Kansas City
Clawson, James W., Springfield
Clay, Hampson S., Poplar Bluff
Clayton, Edgar L., Springfield

Cleary, Frank, St. Louis
Cleveland, Horace F., Long Beach, Calif.
(Member St. Louis Medical Society)
Cline, Edward W., Poplar Bluff
Cline, Harold H., Piedmont
Cline, Merle A., Kansas City
Clithero, William H., St. Louis
Cloyd, Mason D., St. Louis
Coates, Thomas A., St. Louis
Coburn, Donald F., Kansas City
Cochran, Jo R., Cape Girardeau
Cochran, Thomas E., Jr., Springfield
Cochrane, Joseph J., Kansas City
Cockerell, Sanford F., Independence
Coffey, Ralph R., Kansas City
Coffin, Ernest L., Lakeworth, Fla.
(Member St. Louis Medical Society)
Coffin, Theodore A., Kansas City
Coffman, Esther E. L., Lakeworth, Fla.
(Member Ozarks Counties)
Cohen, Benjamin H., Clayton
Cohen, Frank, St. Ann
Cohen, Harry K., Kansas City
Cohen, Hilliard, Kansas City
Cohen, Louis, St. Louis
Cohle, Richard R., Carthage
Cohnberg, Rosellen E., Monett
Cohrs, Clarence C., Moberly
Coil, Paul E., Mexico
Colbert, James W., Jr., St. Louis
Coldwater, Kenneth B., St. Louis
Coleman, William G., St. Louis
Colglazier, Mary C., Kansas City
Coller, Frederick C., Springfield
Collins, Gretchen D., Macon
Collins, Jo E., Joplin
Collins, John M., St. Louis
Collodi, George A., Brentwood
Colom, George A., Kansas City
Comboy, Lawrence J., Independence
Comeau, Richard A., Dexter
Comens, Ruth C., St. Louis
Commerford, James J., Crystal City
Compton, James R., Whittier, Calif.
(Member St. Louis County)
Cone, Alfred J., Chesterfield
Connell, Evan S., Kansas City
Connor, Samuel W., Mountain Grove
Conover, Charles C., Kansas City
Conrad, Adolph H., Jr., St. Louis
Conrad, Joseph A., Chillicothe
Conrad, Marshall B., Clayton
Conrad, Raymond C., Springfield
Cook, Jerome E., St. Louis
Cook, Oliver W., Caruthersville
Cook, Ralph L., University City
Cook, Thomas B., Richmond
Cooke, James K., Jr., Cecil Field, Fla.
(Member Pemiscot County)
Cooper, Charles S., Kansas City
Cooper, Claude W., Thayer
Cooper, Henry T., St. Louis
Cooper, John H., Kansas City
Cooper, John M., Butler
Cooper, Lawrence E., Fort Myers, Fla.
(Member Pemiscot County)
Cooper, Leo F., Kansas City
Cooper, Maurice E., Columbia
Cooper, R. Lee, Warrensburg
Cooper, Thomas J., St. Louis
Cope, James C., Columbia
Cope, Joseph S., Lexington
Copher, Glover H., St. Louis
Cordonnier, Justin, St. Louis
Correnti, Nicholas A., St. Louis
Cortner, Mary C., Kansas City
Cossins, Carlos E., St. Joseph
Costa, Dominic V., St. Louis
Costello, Cyril J., St. Louis
Costello, Joseph P., St. Louis
Costello, Joseph P., Jr., Brentwood
Costen, James B., St. Louis
Costrino, John J., University City
Costrino, Joseph A., St. Louis
Coughlin, Bertrand D., St. Louis
Coulter, Robert L., Jr., St. Louis
Counsell, Chester M., Kansas City
Cowan, Robert D., Aurora
Cowdry, Edmund V., Jr., St. Louis
Cowherd, Joseph B., Kansas City
Cox, Kenneth E., Kansas City
Cox, Mary E., St. Louis
Cox, William A., Jefferson City
Cox, William L., Liberty
Craig, Irwin T., Joplin
Craig, Owen W. D., St. Joseph
Cramb, Arthur B., Lakeland, Fla.
(Member North Central Counties)
Cramer, Quentin, Kansas City
Crawford, Archie L., Joplin
Crawford, Katherine J., University City
Crawford, Oral B., Springfield
Crawford, Robert M., Sullivan
Creditor, Morton C., Kansas City
Creech, Joseph C., Troy
Crego, Clarence H., Jr., St. Louis
Cremer, William J., Fulton
Cresswell, George F., Potosi
Crews, Robert N., Fulton
Crider, Russell J., St. Charles
Criscione, James R., St. Louis
Crispell, Lawrence S., Joplin
Critchlow, William C., Sikeston
Crites, Edward, Sedgewickville
Croom, Dorwyn W., Malden
Crosby, Alice S., Salem
Crossen, Robert J., Chapel Hill, N. Car.
(Member St. Louis Medical Society)
Crossman, Robert W., Webster Groves
Crouch, F. Richard, Farmington
Crowe, John T., Cape Girardeau
Crowell, Hugh C., St. Louis
Crozier, Franklin A., Richmond
Culbertson, William F., Kansas City
Culkin, Thomas R., St. Louis
Cullers, Charles H., Trenton
Cullum, Albert G. J., Cumberland, Ky.
(Member St. Louis County)
Cummings, James H., St. Louis
Cunningham, Darral D., Springfield
Curl, Howard, Joplin
Curran, Edward J., Kansas City
Curran, Kevin E., Kansas City
Curran, Maurice D., Kansas City
Curts, Calvin J., Kansas City
Cutcliff, Daniel J., Kansas City
Cutler, Harold M., St. Louis
Cutler, Harry, St. Louis
Cutter, Edgar B., St. Louis
Czebrinski, Edward W., St. Louis

D

Daake, John W., St. Louis
Dahms, Gustave, St. Louis
Daley, Frank R., Hamilton
Dalton, Arthur R., St. Louis
Daman, George A., St. Louis
Dames, Richard J., St. Louis
Damron, Edward O., Elsberry
Damron, Oscar H., Warrensburg
Danis, Peter G., St. Louis
Dankner, Arnold, St. Louis
Dann, David S., Kansas City
Darnell, Thomas F. B., Columbia
Daughaday, William H., St. Louis
Daugharty, Duane A., St. Louis
Daum, Harold F., Kansas City
Davault, George K., Richmond
Davidson, John D., St. Louis
Davidson, Morris, Clayton
Davie, Joseph, St. Louis
Davis, C. Braxton, Nevada
Davis, Edgar W., St. Louis
Davis, Frank L., St. Louis
Davis, Harry H., Rolla
Davis, Herbert V., Kansas City
Davis, Irl R., St. Louis
Davis, Jack M., Raytown
Davis, John J., Overland Park, Kansas
(Member Jackson County)
Davis, Kenneth A., Kansas City
Davis, Landis Y., Canton
Davis, Leonard L., Jr., Mexico
Davis, Martin W., Webster Groves
Davis, Myron W., St. Louis
Davis, Paul C., Neosho
Davis, Robert C., Kansas City
Davis, Wilbur L., Charleston
Day, Anthony B., Marshall
Day, Cameron B., Kansas City
Day, Maxwell, St. Joseph
Deakin, Rogers, St. Louis
Dean, Francis D., Fayette
Dean, Lee W., Jr., St. Louis
Decker, Albert I., Kansas City
DeGenova, G. H., Ste. Genevieve
DeHovitz, Bernard, St. Louis
Deitchman, Robert B., St. Louis
de la Torre, John J., Sullivan
Delzell, William A., Springfield
DeMaria, Peter F., Kansas City
Demko, Frank, St. Louis
Demko, William, Sappington
DeMott, John D., Kansas City
DeMotte, John A., Kansas City
Dempsey, David T., Kennett
Denney, Richard W., Mountain Grove
Dennie, Charles C., Kansas City
Denninghoff, James C., Columbia
Denny, H. M., Union
Denton, Levi D., Hayti
DePew, Heber B., St. Louis
Dernoncourt, John E., Charleston
DeTar, Burleigh E., Joplin
DeTar, B. E., Jr., Joplin
DeTar, George F., Joplin
Deutch, Max, St. Louis
Devine, John B., St. Louis
Devine, Joyce E., St. Louis
Deweese, Everett R., Kansas City
Deyton, John W., St. Louis
Dickler, Donald J., St. Louis
Dickson, Frank D., Kansas City
Dieckman, William C., Dexter
Diehr, Alvin H., St. Louis
Diehr, Maurice A., St. Louis
Diekroeger, M. L., Boonville
Dietrich, Karl D., Columbia
Dietz, M. Wendell, Springfield
DiLeo, Senatro W., St. Louis
Dill, Foster A., Maplewood
Dillard, Erin M., Springfield
Dills, Joseph N., Springfield
Dimond, Edgar A., McKinney, Texas
(Member Greene County)
Dinelli, Frank E., Poplar Bluff
Diveley, Rexford L., Kansas City
Dixon, John R., Brookfield
Dixon, Otto J., Kansas City
Dixon, Vewiser L., Kansas City
Dlabal, Luke J., Independence
Dmytryk, Eugene T., St. Louis
Doan, Deborah, Bakersfield
Doane, William L., Grandview
Dodd, Robert B., St. Louis
Dodge, Mark, Kansas City
Dodge, Milton, Kansas City
Doggett, Sylvester, Cape Girardeau
Doherty, William R., Kansas City
Doisy, Robert A., Glendale
Dolezal, Joseph B., Kansas City
Donahoe, James L., St. Louis
Donaldson, Robert C., St. Louis
Donley, Leo F., Jr., Ferguson
Donley, Robert R., Monett
Donnell, Harold E., DeSoto
Donnell, Robert H., Crystal City
Donnell, Thomas A., DeSoto
Dooley, Thomas A., St. Louis
Dorris, Richard P., Jefferson City
Dorsch, Ervin H., Independence
Dorsett, E. Lee, University City
Doubek, John C., St. Louis
Doubek, John C., Jr., St. Louis
Douglas, John W., Joplin
Douglass, Jesse E., Kansas City
Dowd, James F., Jr., St. Louis
Dowell, Donald M., Chillicothe
Dowell, Horace S., Chillicothe
Downey, James W., Kansas City
Doyle, Charles R., St. Louis
Drace, Charles C., St. Louis
Drace, Charles C., Jr., St. Louis
Drace, James J., Cape Girardeau
Drake, Avery A., Rolla
Drake, Roy F., Kansas City
Drake, Truman G., St. Louis
Drake, William L., Jr., St. Louis
Draney, Thomas F., Kansas City
Drescher, Emmett B., St. Louis
Drews, Leslie C., St. Louis
Drey, Norman W., St. Louis
Dreyer, Carl J., Webster Groves
Dreyer, Philip V., Huntsville
Dripps, Roy C., St. Louis
Drisko, Robert M., Kansas City
Drowns, Bruce V., Kansas City
Drum, Clarence G., St. Louis
Drum Aff, Helen M., Clayton
Duane, George W., St. Louis
Duckworth, John K., Hayti
Duden, Charles W., St. Louis
Duemler, John H., St. Louis
Duer, Mildred C., Kansas City
Duffy, Edgar A., Trenton
Duffy, Oliver F., Trenton
Duggan, John J., Jr., Kirkwood
Dulick, Michael, Brentwood
DuMont, Clement C., St. Joseph
Dunaway, Howard A., Sikeston
Duncan, Ralph E., Kansas City
Duncan, Robert D., Springfield
Duncan, William H., Kansas City
Dunham, R. H., North Kansas City
Dunham, Richard B., St. Louis
Dunleavy, James D., Kansas City
Dunmire, George Q., Kennett
Dunn, Robert E., St. Louis
Dunshee, Robert E., Maryville
Durnell, Monaford D., Lee's Summit
Durst, Henry, Fulton

Duval, Addison M., Jefferson City
Dworkin, Saul, St. Louis
Dwyer, Frank X., Kansas City
Dwyer, Hugh L., Kansas City
Dwyer, Reinhardt D., North Kansas City
Dwyer, Thomas L., Mexico
Dyer, Dallas J., St. Louis
Dyer, David P., Sedalia

E

Eades, Dee W., St. Louis
Eagleton, Mark D., Clayton
Earp, Ralph K., St. Louis
Ebel, Eugene H., St. Louis
Eber, Carl T., St. Louis
Eberle, John P., St. Louis
Eberle, Vincent L., St. Louis
Echterhoff, Harry R., St. Louis
Eck, Birkle, St. Louis
Ecker, Decider, Pacific
Eckert, Clarence T., St. Louis
Ecklund, Archibald M., Great Lakes, Ill. (Member St. Louis Medical Society)
Ector, Henry J., Mexico
Edde, Clifford G., Kansas City
Edele, Eugene H., St. Louis
Edmonds, Devilla D., Kansas City
Edmondson, Charles T., Springdale, Ark. (Member Dunklin County)
Edwards, D. R., Sedalia
Edwards, Francis L., Monett
Edwards, Joseph C., St. Louis
Edwards, Theodore F., North Kansas City
Edwards, Waldo B., Kirkwood
Efron, Joseph, Olivette
Eggleston, D. E., Macon
Egley, Loren E., Kirkwood
Eidelman, Jack R., St. Louis
Eidmann, Walter P., St. Louis
Eigel, Edwin G., St. Louis
Eimer, Charles E., St. Louis
Eisemann, Gustave, Kansas City
Eisenmann, Benjamin P., New Haven
Eisenstein, Albert B., St. Louis
Eklund, Alfred W., Pleasant Hill
Elders, Frank A., Jr., Cuba
Eldridge, Charles J., Kansas City
Elias, David J., Independence
Eliscu, Juliette, Joplin
Elkins, Ronald F., Springfield
Eller, Byron H., Bangkok, Thailand (Member Ozarks Counties)
Ellersieck, Dorothy M., St. Louis
Ellery, William L., LaGrange
Ellett, William H., Appleton City
Elliott, James R., Pasadena, Calif. (Member Jackson County)
Elliott, Raymond G., Kansas City
Elliott, Wade E., Kansas City
Ellis, Burnett E., Gideon
Ellis, Calvin C., St. Louis
Ellis, Coburn H., Garden City
Ellis, Francis J., Springfield
Ellis, Sam T., Richmond, Va. (Member Marion-Ralls-Shelby Counties)
Ellison, Leroy E., Maplewood
Ellsworth, Willard, Cainsville
Elrod, Dennis B., Cape Girardeau
Elser, Otto H., Independence
Elson, Julius, Ladue
Emerson, Reynolds L., Brentwood
Emmert, Fred, St. Louis
Engel, Lawrence P., Kansas City
Engelhardt, Robert C., Poplar Bluff
Engleman, Reinhold, St. Louis
English, Milton T., Jr., Kirksville
English, Wallace D., Cardwell
Engman, Martin F., Jr., St. Louis
Engstrom, Denton P., Springfield
Enloe, Lawrence D., Jefferson City
Enna, Carl D., Kansas City
Epp, George J., St. Louis
Epple, Kathryn C., Mexico
Epple, Lawrence K., Mexico
Epps, Curtis, Springfield
Erlanger, Herman, St. Louis
Erlanger, Joseph, St. Louis
Ernst, Edwin C., Jr., St. Louis
Ernst, Edwin C., St. Louis
Ernst, Joseph G., Oakland
Ernst, Richard E., St. Louis
Ernst, Roland P., St. Louis
Eshelman, Albert D., Independence
Eskeles, Irwin H., St. Louis
Esker, George, Nevada
Esslinger, Arthur T., St. Louis
Estes, Albert M., Cape Girardeau
Estes, Jack M., Ferguson
Eto, Jackson, St. Louis
Eubank, David F., Raytown
Eubank, Dillard M., Raytown
Eubank, William R., Kansas City
Eubank, William Y., Raytown
Evans, Alden M., Columbia
Evans, Ezra L., Jr., Springfield
Evans, Harry T., Branson
Eversoll, Norton J., St. Louis
Ewert, J. O., Sedalia
Exon, C. Stuart, Jefferson City
Eyermann, Charles H., St. Louis
Eyermann, H. Walter, Warrenton

F

Fair, William L., Chillicothe
Fairchild, James F., Perryville
Fairshter, Alex E., St. Louis
Falk, O. P. J., St. Louis
Fallet, Charles E., DeSoto
Farley, Claude C., Kansas City
Farley, William M., St. Louis
Farney, Jacob P., Kansas City
Farnsworth, Jesse J., Kansas City
Farrar, C. B., Cape Girardeau
Farrar, John T., Greenwich, Conn. (Member St. Louis Medical Society)
Farrell, Robert J., St. Louis
Farris, William Walker, St. Louis
Farthing, Fred R., Springfield
Farthing, Gene W., Springfield
Fehlman, Bernard F., Jr., St. Louis
Feierabend, Frank L., Kansas City
Feind, Earl E., Rolla
Feinstein, Leon A., St. Louis
Feist, George V., Kansas City
Feldaker, Robert M., St. Louis
Feldman, David, St. Louis
Feller, C. E., Springfield
Feller, Harold H., St. Louis
Fellhauer, Carl M., St. Louis
Fellows, William W., Address Unknown (Member Chariton-Macon-Monroe-Randolph Counties)
Feltz, L. W., Perryville
Ferguson, Donald S., Kansas City
Ferguson, Eugene H., Kansas City
Ferguson, James T., Kansas City
Ferguson, John P., Jr., Springfield
Ferguson, L. H., Jr., Joplin
Ferguson, Luther J., St. Joseph
Ferguson, Ralph L., Joplin
Ferguson, Robert M., Webb City
Ferguson, Thomas B., St. Louis
Ferguson, Wilson J., Sikeston
Ferrara, John P., St. Louis
Ferrell, Thomas E., Jr., Springfield
Ferris, Carl R., Kansas City
Fessenden, Ersel M., Springfield
Field, Lawrence M., Kansas City
Finger, Donald H., St. Louis
Fingerhood, Marvin G., St. Louis
Fingert, H. H., St. Louis
Finkel, Barney W., St. Louis
Finkle, Robert H., Kansas City
Finley, Freeman L., St. Louis
Finn, Murray E., St. Louis
Finnegan, Frank R., St. Louis
Finnegan, Joseph V., St. Louis
Finney, Wm. O., Chaffee
Fischer, Edward H., N. Kansas City
Fischer, Erich, St. Louis
Fischer, Theodore, Altenburg
Fish, Virgil O., St. Louis
Fisher, George E., Lebanon
Fisher, Joseph L., St. Joseph
Fisher, Stanley D., Sedalia
Fitch, C. H. Max, Springfield
FitzGerald, Leo P., University City
Fitzgerald, Robert H., Independence
Fitzgerald, William T., St. Louis
Flance, Israel J., St. Louis
Flanders, Horace F., Kansas City
Flatley, John A., Raytown
Flavan, David B., St. Louis
Fleishman, Alfred, St. Louis
Fleming, Jacob W., Jr., Moberly
Fleming, Paul D., Clayton
Fleming, Robert J., St. Charles
Fleming, Royall B., Kansas City
Fleming, Thomas S., Moberly
Fletcher, Paul F., St. Louis
Fletes, James W., St. Louis
Florian, Albert J., Kansas City
Flotte, Bernard H., St. Louis
Flotte, Sylvester A., St. Louis
Flynn, Edward P., St. Louis
Flynn, John T., St. Louis
Flynn, Joseph E., Columbia
Flynn, Joseph E., St. Louis
Flynn, Thomas T., St. Louis
Focht, Ralph H., Strafford
Fogarty, Edward R., St. Joseph
Folck, William P., Kansas City
Fong, Richard R., St. Charles
Ford, Lee T., Jr., St. Louis
Ford, Walter W., Gordonville
Forgrave, John R., St. Joseph
Forgrave, Leon P., St. Joseph
Forman, George W., St. Joseph
Forman, Louis H., Kansas City
Forsen, James A., St. Louis
Forsman, Waldo W., Jr., Sappington
Forster, Armand C., St. Louis
Forsyth, B. Todd, St. Louis
Forsythe, Robert W., Kansas City
Forti, John J., St. Louis
Foster, Howard M., St. Louis
Foster, Jack L., Desloge
Foster, Leon, St. Louis
Foster, Robert L., St. Louis
Fowler, Fred D., Kansas City
Fowler, I. Charles, N. Kansas City
Fowler, James W., Kansas City
Fowler, Marvin L., West Plains
Fox, Leon J., St. Louis
Fox, Robert E., St. Louis
Frame, Homer G., Springfield
Francis, William C., Springfield
Francka, W. F., Hannibal
Frank, Adolph M., St. Louis
Frankl, George, Kansas City
Franklin, Harold A., St. Louis
Franklin, Max S., St. Louis
Franklin, Ralph, Bakersfield, Calif. (Member SEMO Counties)
Fraser, Sydney A., St. Louis
Frazier, Robert L., Charleston
Fredeen, Robert C., Kansas City
Frederick, Raymond O., St. Louis
Freedman, Harold, St. Louis
Freedman, Ruth S., St. Louis
Freeman, David M., St. Louis
Freeman, Hal E., Springfield
Freeman, Robert F., Columbia
Freeman, Spencer L., Kirksville
Freiermuth, Leo J., Jr., Eau Gallie, Fla. (Member St. Louis Medical Society)
Freiheit, Harold J., Ladue
Freimuth, L. E., St. Louis
Frerking, Herbert W., St. Louis
Freund, H. G., Fulton
Freund, Newton M., St. Louis
Freund, Samuel J., St. Louis
Friedman, Bernard, St. Louis
Friedman, Morris L., Kansas City
Frick, John P., Kansas City
Friedrichs, Vernon D., Pilot Grove
Fries, Armand D., St. Louis
Fries, John W., St. Louis
Fries, William A., St. Louis
Frisch, Jane, St. Louis
Friskel, Arthur K., St. Louis
Fritzlen, Thomas J., Kansas City, Kansas (Member Jackson County)
Froelich, Edwin J., St. Louis
Froelich, Rae W., Lebanon
Froelich, Robert E., Augusta, Georgia (Member St. Louis County)
Fryer, Minot P., St. Louis
Fuchs, George J., Creve Coeur
Fuchs, George J. Jr., Columbia
Fuhrman, Donald L., Kansas City
Fulbright, James H., Springfield
Fulkerson, Wilbur E., Higginsville
Fulks, Richard B., California
Fulton, Albert E., Kansas City
Funsch, Edwin C., St. Louis
Funsch, Robert E., St. Louis
Furla, Gus J., St. Louis
Furlow, Leonard T., St. Louis
Fuson, Levi, H., St. Joseph
Fuson, William A., Trenton
Fuzzell, Jameso, Kennett

G

Gaebe, Harold C., Desloge
Gaffney, Caldwell J., St. Louis
Gafney, George T., St. Louis
Gaines, Quentin McD., Kirkwood
Gainey, Harold L., Kansas City
Galbraith, Charles J., St. Louis
Gale, Joseph F., Chillicothe
Gale, Philip R., St. Louis
Galeota, William R., Columbia
Gall, Ira, St. Louis
Gallagher, John F., St. Louis
Gallagher, Lionel M., California
Gallivan, Edward L., University City

Gandlmayr, Jack M., St. Louis
Ganley, William C., Kansas City
Gansloser, Maximilian W., St. Louis
Gansloser, Wilbert M., Clayton
Gantner, George E., Jr., St. Louis
Gantt, Ernest S., Jr., Mexico
Gantz, John A., St. Louis
Garcia, Charles L., Mexico
Gard, Raymond F., Independence
Gardner, Joseph W., Glasgow
Garfinkel, Bernard T., St. Louis
Garner, Lynn M., Jefferson City
Garrett, Glen H., Columbia
Garrison, Roy F., Kansas City
Gary, George, Marceline
Gaskins, John H., Kansas City
Gaston, Ralph E., Richmond Heights
Gauer, Robert J., Kansas City
Gaunt, Frank P., Webster Groves
Gaunt, William D., Columbia
Gay, Elmer E., Richmond
Gay, George, Ironton
Gay, Lee P., Jefferson City
Gearhart, Merriam, Bethany
Gedney, William B., St. Louis
Geha, Braham J., Kansas City
Geise, August W., Jr., Albuquerque, New Mexico
(Member St. Louis Medical Society)
Gelperin, Abraham, Kansas City
Gempel, Paul A., Kansas City
Gentry, Enoch N., Jr., Kansas City
Gentry, Marvin C., Ava
Gentry, Merritt L., Springfield
Geraughty, Edward, Liberty
German, Walter A., Jr., Springfield
Gernstetter, Sangwill L., Poplar Bluff
Gerst, Aloysius C., St. Louis
Gestring, Hugh A., Kansas City
Getelson, Joseph, Kansas City
Gibbons, Edward H., St. Louis
Gibson, David M., Kansas City
Gibson, Helen F., St. Louis
Gibstine, Marvin H., St. Ann
Gieselman, Ralph V., St. Louis
Giesler, Donald H., Osceola
Gildea, Edwin F., St. Louis
Gildea, Margaret C. L. St. Louis
Gilden, Jerome J., St. Louis
Gilkey, Harry M., Kansas City
Gillespie, Roy, Branson
Gillespie, William J., St. Louis
Gilliland, Oliver S., Kanass City
Gillmor, Charles S., Kansas City
Ginsberg, Norman A., Kansas City
Gish, Rutledge, Fulton
Gissy, Charles J., St. Louis
Gist, William W., Kansas City
Gitt, Joseph J., St. Louis
Gladney, John H., St. Louis
Glascock, Donald W., Palmyra
Glaser, Martin J., St. Louis
Glass, William J., Jr., Monett
Glassberg, Bertrand Y., St. Louis
Glasscock, Ernest L., Kansas City
Glenn, Elmer E., Springfield
Glennon, William P., St. Louis
Glick, Harry N., St. Louis
Glover, Kenneth, Mt. Vernon
Gloyne, Howard F., Kansas City
Glynn, Robert R., Springfield
Gnade, Albert J., St. Louis
Goebel, Joan M., St. Louis
Goldberg, Isadore E., Braymer
Goldenberg, Sidney, St. Louis
Goldenson, Max J., St. Louis
Goldfarb, Alvin, Olivette
Goldman, Alfred, St. Louis
Goldman, Hyman J., St. Louis
Goldman, Melvin L., St. Louis
Goldman, Stanley L., Kansas City
Goldring, Sidney, St. Louis
Goldsich, Edward, Kansas City
Goldstein, Irwin R., Kansas City
Gollub, Samuel W., St. Louis
Gomez, Cesar A., Jr., St. Louis
Gonser, Karl B., Sedalia
Gonzalez, Mario Garza, Warrensburg
Good, James T., Springfield
Goodman, J. N., Glendale
Goodman, LeRoy, Kansas City
Goodman, Nathaniel, St. Louis
Goodrich, Harold A., Webster Groves
Goodson, William H., Liberty
Goodson, William H., Jr., Kansas City
Gordon, James S., Columbia
Gorelick, David F., Springfield
Gorham, Arwin E., St. Louis
Gorla, Wayne O., St. Louis
Gorrell, Ned B., Grandview
Gose, Don F., Springfield
Gowen, Leo F., St. Louis
Grabau, Gene H., St. Louis
Grable, James D., Portageville
Grabske, Charles F., Independence
Grabske, Charles F., Jr., Independence
Grace, Charles M., Chillicothe
Graeser, Richard G., Kirkwood
Graham, James W., Kansas City
Graham, Wallace H., Kansas City
Graneto, Joseph A., St. Louis
Grant, Claude S., St. Joseph
Grant, Samuel B., St. Louis
Grantham, Samuel A., Jr., Joplin
Grauerholz, James W., Kansas City
Graul, Elmer G., St. Louis
Graul, Walter P., St. Louis
Graves, Arthur J. Mt. Vernon
Graves, F. Burton, Joplin
Gray, Walter C., St. Louis
Grayson, R. R., Columbia
Grayson, Ted L., St. Louis
Greaves, Eli A., Kansas City
Grebel, Clement B., St. Louis
Greditzer, Arthur S., St. Louis
Green, Daniel, St. Louis
Green, John R., Independence
Green, John R., Independence
Green, Manuel E., St. Louis
Green, Robert S., Kennett
Green, Stanley L., Independence
Greenbank, Arthur J., St. Louis
Greenberg, Charles, St. Joseph
Greene, Harry L., Hannibal
Greene, W. Wallace, Kansas City
Greenman, Marshall B., Clayton
Griffin, Mary E., Buffalo
Griffin, Olin A., Jr., Buffalo
Griffith, John A., Jr., Kansas City
Griggs, James Y., St. Louis
Grimes, M. E., St. Joseph
Grindon, Joseph B., Jr., St. Louis
Griot, Albert J., St. Louis
Groce, George, Fulton
Grogan, Frank M., St. Louis
Gronau, Axel R., St. Louis
Grosskreutz, Joseph A., St. James
Grossman, Marvin, Fredericktown
Grove, G. W., Knob Noster
Growdon, John A., Kansas City
Grueb, Paul M., St. Louis
Gruenfeld, Gerhard E., St. Louis
Grundmann, William H., St. Louis
Grybinas, Vytautas J., E. St. Louis, Ill.
(Member St. Louis Medical Society)
Guasch, Joseph S., Mt. Vernon
Gubin, Alan S., Caruthersville
Guccione, Joseph B., St. Louis
Guffey, Don C., Kansas City
Guhleman, Henry V., Jr., Jefferson City
Guldner, Edmond, Lamar
Gulick, Charles R., St. Louis
Gullett, Charles C., Kansas City
Gum, William R., St. Louis
Gummels, Belmont B., St. Louis
Gundlach, Arthur, St. Louis
Gundle, Sigmund, Kansas City
Gunn, Jack, Versailles
Gunn, Richard W., Kansas City
Gunn, Walter T., St. Louis
Gurnee, Landon H., Jefferson City
Guze, Lucien B., Los Angeles, Calif.
(Member St. Louis Medical Society)
Guze, Samuel B., Los Angeles, Calif.
(Member St. Louis Medical Society)
Gzell, Ronald, St. Louis

H

Hackmeyer, Rubin, St. Louis
Haddock, James N., Webster Groves
Haffner, Heinz, St. Louis
Hagan, Daniel J., St. Louis
Hagebusch, Omer E., St. Louis
Hagemann, Paul O., St. Louis
Haggen, Margaret E., Kansas City
Hahn, Andrew L., Springfield
Haight, John M., Kansas City
Hale, Tyre H., St. Louis
Haley, Jack A., Kansas City
Hall, Andy, Jr., St. Louis
Hall, David W., Springfield
Hall, Durward G., Springfield
Hall, Eugene W., Ferguson
Hall, Frank W., Cape Girardeau
Hall, John, Ashland
Hall, Lee A., St. Louis
Hall, Marvin F., Joplin
Hall, Preston C., St. Louis
Hall, Robert A., St. Louis
Hall, Robert G., St. Louis
Hall, Thomas B., Kansas City
Hallberg, John W., Everton
Halperin, Phillip H., Kansas City
Halpern, Lawrence K., St. Louis
Hamel, Herbert A., Kansas City
Hamill, Robert W., Kansas City
Hamilton, Caldwell K., St. Louis
Hamilton, Eugene G., St. Louis
Hamilton, Eugene H., Joplin
Hamilton, Hugh G., Kansas City
Hamlin, Wyeth, Hannibal
Hammler, Christiana V., St. James
Hammond, John J., St. Louis
Hampton, Henry E., St. Louis
Hampton, Oscar P., Jr., St. Louis
Hampton, Stanley F., St. Louis
Hamtil, Edward W., St. Louis
Hanan, Ernest B., Springfield
Handler, David, University City
Handler Eric, St. Joseph
Handler, Fred P., Jefferson City
Handley, James M., Mission, Kansas
(Member Jackson County)
Hanes, Lee D., Kansas City
Hanes, Robert L., Kansas City
Hanford, Wesley W., St. Louis
Hankin, Norman M., St. Louis
Hanlon, C. Rollins, St. Louis
Hanna, Richard E., St. Louis
Hans, Willard J., St. Louis
Hansbrough, Eugene T., Poplar Bluff
Hansel, French K., St. Louis
Hansen, Arthur L., Butler
Hansen, David M., Florissant
Hanser, Otto C., St. Louis
Hanser, S. Albert, St. Louis
Hanser, Theodore H., St. Louis
Hanss, Armand W., Springfield
Hardacre, Ruth Anna, Kansas City
Hardesty, Joel W., Hannibal
Hardwicke, Henry M., Jefferson City
Hardy, Guerdan, Clayton
Hardy, John W., Butte, Montana
(Member Chariton-Macon-Monroe-Randolph Counties)
Hardy, Joseph A., Jr., St. Louis
Harell, Alex, St. Louis
Harford, Carl G., St. Louis
Harkin, James C., St. Louis
Harkins, William B., St. Louis
Harkness, Harry, Warrensburg
Harland, Robert E., Ironton
Harless, Morris S., Kansas City
Harmann, Martin F., St. Louis
Harms, Florian L., Salisbury
Harned, Bert W., Prairie Village, Kansas
(Member Jackson County)
Harner, Casper G., St. Joseph
Harper, Fleming B., St. Louis
Harrell, Henry J., Morrisville
Harrington, William J., St. Louis
Harris, Charles W., St. Louis
Harris, Hinman, A., University City
Harris, Solon P., St. Louis
Harrison, Lee B., St. Louis
Harrison, Stanley L., St. Louis
Hart, Lawrence W., Kansas City
Hart, Martin M., Salem
Hart, Pearl V., Coatsville
Harting, Hugh R., St. Louis
Hartman, Paul T., St. Louis
Hartmann, Alexis F., St. Louis
Hartnett, Leo J., Clayton
Hartstein, Jack, St. Louis
Hartwell, Basil O., Drexel
Hartwig, Frederick H., Kansas City
Hartwig, John A., St. Louis
Harwell, James L., Poplar Bluff
Harwell, J. Lester, Poplar Bluff
Hash, Emalyn H., Kansas City
Hashinger, Edward H., La Jolla, Calif.
(Member Jackson County)
Haskell, Ralph E., Norborne
Hasselblad, Oliver W., Kirksville
Hassett, Henry A., St. Louis
Hasson, Jack, St. Louis
Hasson, Robert, Moberly
Hata, Daikichi, Boonville
Haw, Marvin T., Jr., Bonne Terre
Hawk, Bray O., St. Louis
Hawker, William D., St. Louis
Hawkins, George L., Jr., St. Louis
Hawkins, George W., Salisbury
Hawkins, Lee W., Glendale
Hayden, Loyola F., St. Louis
Hayek, Wesley E., St. Louis
Hayes, Lawrence L., Kansas City
Haynes, James W., St. Louis
Haynes, Lee, Kansas City
Haynes, Pugh, Jr., St. Louis
Haynes, Robert C., Marshall
Haynes, Solon E., Kansas City
Hazen, Robert M., Kansas City
H'Doubler, Francis T., Springfield

H'Doubler, Francis T., Jr., Springfield
Hearst, Allen L., Kansas City
Heeb, Max A., Sikeston
Heid, Lloyd L., St. Louis
Heideman, Alvah G., St. Louis
Heideman, Milo L., St. Louis
Heifetz, Carl J., St. Louis
Heilbrunn, Max, Lockwood
Heimburger, Leroy F., Springfield
Heinbecker, Peter, St. Louis
Helbing, Edward J., St. Louis
Heller, B. Marcus, Kansas City
Hellerstein, Stanley, Kansas City
Hellweg, Charles E., Mt. Vernon
Helm, James O., New Florence
Helman, Richard G., Kansas City
Henderlite, John W., St. Louis
Hendin, Aaron, Olivette
Hendren, Glenn W., Liberty
Hengen, Henry E., Bridgeton
Henke, Charles F., St. Louis
Hennelly, John J., St. Louis
Henrickson, Hardin M., Poplar Bluff
Henrickson, Hardin O., Poplar Bluff
Henrickson, William E., Poplar Bluff
Henry, Clarke L., Kansas City
Henry, Clifford E., Kirksville
Henry, Schubert D., Kansas City
Henschel, Eugene V., St. Louis
Hensley, Daniel R., Wardell
Hepner, Walter R., Jr., Columbia
Herbert, Charles T., Cape Girardeau
Herbst, Frank, Kansas City
Herman, Allen I., St. Joseph
Herman, Morris, St. Louis
Herrick, Harold C., La Grange
Herrman, George V., Kansas City
Hershey, Falls B., University City
Hertel, Albert L., St. Louis
Hess, Paul D., Kansas City
Hetlage, Louis P., Troy
Heusler, Anton F., St. Louis
Hewitt, Walter R., St. Louis
Heyer, Oscar C., St. Louis
Hibbard, Blaine Z., Kansas City
Hickerson, John C., Independence
Hickerson, William H., Independence
Hickey, Robert F., St. Louis
Higgins, Robert S., Kansas City
Hildreth, H. Rommel, St. Louis
Hill, Jack H., Kansas City
Hill, James E., Fulton
Hill, Jesse N., Independence
Hilton, Paul E., Kirksville
Hines, Arthur A., St. Louis
Hines, Paul, Kansas City
Hink, Frederick W., Kansas City
Hirsch, Albert, Vandalia
Hirsch, Joe E., Kansas City
Hitchcock, Waldo P., Columbia
Hite, Henry A., Green Ridge
Hobart, Carl A., St. Louis
Hobbs, Alonzo G., St. Louis
Hobbs, Earl B., Smithville
Hobbs, George H., Mt. Vernon
Hobbs, John E., St. Louis
Hoctor, Emmett F., Farmington
Hodge, Robert H., N. Kansas City
Hodges, Fred J., III, St. Louis
Hodgson, Frank H., Kansas City
Hoefer, Walter H. V., St. Louis
Hoelscher, Harold F., Warrenton
Hoeper, Samuel D., Kansas City
Hoffman, Jacob S., Kansas City
Hoffmann, Augustin D., St. Louis
Hoffmann, R. Lee, Kansas City
Hofsommer, Armin C., Webster Groves
Hofstatter, Leopold, St. Louis
Hofstatter, Lilli, St. Louis
Hogan, Daniel F., Kansas City
Hogan, Frank E., Mound City
Hogancamp, Charles E., St. Louis
Hogeboom, George W., Springfield
Hogg, Garrett S., Jr., Cabool
Hogue, Frank S., Kansas City
Holbrook, Charles K., St. Louis
Holcomb, Cecil E., Steele
Holdenried, William E., St. Louis
Holliday, Morgan L., Fillmore
Hollingsworth, Ray S., Clinton
Hollo, Vencel W., St. Louis
Hollweg, Kenneth C., Kansas City
Holman, Jurney H., Unionville
Holman, Melvin V., Kansas City
Holmes, David R., St. Louis
Holmes, John L., Columbia
Holmes, Lemuel I., Miller
Holscher, Edward C., St. Louis
Holt, Earl P., Jr., St. Louis
Holt, Waldo S., Kansas City
Holton, Edward B., Independence
Holtz, Alan S., Kirkwood
Holtzman, Samuel, Joplin
Homan, Joseph S., St. John's
Honich, Nicholas J., St. Louis
Hook, Waller G., Kansas City
Hooker, John H., St. Louis
(Member Pike County)
Hoover, H. Lee, Jr., Springfield
Hope, James L., Lebanon
Hopkins, Florian G., Gideon
Hopkins, Thomas J., Sedalia
Hopkins, Thomas S., Sedalia
Hornback, Edward R., Joplin
Hornback, George A., Hannibal
Horner, John L., St. Louis
Horst, Otto C., Springfield
Horton, James D., Springfield
Horwitz, Irwin B., St. Louis
Hosto, Leland E., St. Louis
Houck, Russell M., Kecoughtan, Va.
(Member Clay County)
Houston, Vincent T., St. Louis
Howden, Thomas L., St. Joseph
Howe, Louis F., St. Louis
Howell, B. D., Brookfield
Hoxworth, Gerald M., Cape Girardeau
Hrdlicka, Victor E., St. Louis
Huber, Erwin T., St. Louis
Huber, Lasley E., Moberly
Huck, Frank F., Fenton
Huck, Richard F., St. Louis
Huckstep, Robert A., Farmington
Huggins, Albert M., St. Louis
Hughes, Gerald E., Kansas City
Hughes, Judson M., St. Joseph
Hughes, Robert G., Creve Coeur
Hughes, Shelby B., Clinton
Hulbert, Bernard, St. Louis
Hull, Walter S., Faucett
Humberd, Charles D., Barnard
Hummel, Anton J., St. Louis
Humphrey, Harvey A., St. Louis
Humphrey, James, St. Louis
Humphreys, Edward T., Boonville
Hungate, Carroll P., Kansas City
Hunt, Claude J., Kansas City
Hunt, John W., Jr., Leadwood
Hunt, Lloyd H., Salem
Hunt, William J., St. Joseph
Hunter, James R., Webster Groves
Hunter, Martin P., Kansas City
Hurst, Ben B., Lebanon
Hurst, Wilfred W., Joplin
Hurwitt, Frank, Kansas City
Husted, George W., Parma
Hutchinson, James H., Jr., St. Louis
Hutto, A. Herman, St. Louis
Hutton, Joseph L., St. Louis
Hyman, Anna, St. Louis
Hyndman, Charles E., St. Louis

I

Ide, Lucien W., St. Joseph
Imes, Clifford H., Lynwood, Calif.
(Member Ozarks Counties)
Imes, Elvin D., Maryville
Ingham, Walton C., Kansas City
Inkley, John J., St. Louis
Irick, Carl C., Webster Groves
Irland, Robert D., Kansas City
Irwig, Fred, Kansas City
Irwin, William F., Leasburg
Isbell, Charles H., Carthage
Israel, Milton R., St. Louis
Ittner, George W., Jr., St. Louis
Ivy, Henry B., Springfield
Izmirlian, Grant, Webster Groves

J

Jackson, Robert L., Columbia
Jackson, Vernon B., Fulton
Jackson, William R., Kansas City
Jackson, William R., Maryville
Jacob, Walter P., Kansas City
Jacobs, Charles C., St. Louis
Jacobs, Frederick A., St. Louis
Jacobs, Morton, Kansas City
Jaeger, Joseph N., Jackson
Jaime, Nicholas, Kansas City
James, Edward D., Joplin
James, Norman A., St. Louis
James, Otis E., Jr., Kansas City
James, William M., St. Louis
Janney, James G., Jr., Clayton
Jansen, Robert, Kansas City
Jarvis, James A., Kansas City
Jaudon, Joseph C., Clayton
Javaux, Everett J., St. Louis
Jean, J. Ted, St. Louis
Jeans, Virgil, Joplin
Jeffries, Robert C., Kansas City
Jenkins, Joseph M., St. Charles
Jenkins, Paul A., Lebanon
Jennett, Harry N., Kansas City
Jennett, James H., Kansas City
Jennings, Ethlyn C., N. Kansas City
Jennings, Perry W., Canton
Jensen, J. Ernest, St. Louis
Jick, Sidney, St. Louis
Johns, George A., Marshall
Johnson, C. Laurence, Kansas City
Johnson, Charles R., San Diego, Calif.
(Member Marion-Ralls-Shelby Counties)
Johnson, Charles S., Warrensburg
Johnson, David S., St. Louis
Johnson, Earl W., Cape Girardeau
Johnson, Edgar W., Prairie Village, Kansas
(Member Jackson County)
Johnson, Edward M., El Paso, Texas
(Member Chariton-Macon-Monroe-Randolph Counties)
Johnson, Ferrell H., Lebanon
Johnson, Frank C., Doniphan
Johnson, George L., San Francisco, Calif.
(Member Greene County)
Johnson, Glenn D., Maysville
Johnson, Grover C., Marthasville
Johnson, James S., Kansas City
Johnson, Mitchell D., Ferguson
Johnson, Paul A., Kansas City
Johnson, Q. Ray, Jr., New Orleans, La.
(Member Pike County)
Johnson, Richard E., Columbia
Johnson, Roy, Ferguson
Johnson, Thomas M., Kansas City
Johnson, Tom L., Shawnee, Okla.
(Member Callaway County)
Johnson, Warford B., Springfield
Johnson, William A., Kansas City
Johnson, William F., Springfield
Johnston, Joseph L., Springfield
Johnstone, John, Jr., Kirkwood
Johnstone, Paul N., Kansas City
Jolly, Benjamin N., Mexico
Jolly, William H., Mexico
Jonas, Harry S., Jr., Independence
Jones, Andrew B., St. Louis
Jones, Augustin, St. Louis
Jones, Dorothy J., Clayton
Jones, Edward E., Lilbourn
Jones, Edward S., Harrisonville
Jones, George H., Kansas City
Jones, Grey, St. Louis
Jones, James B., Brentwood
Jones, John B., Kirksville
Jones, Keith D., Warrensburg
Jones, Otey S., St. Louis
Jones, Ralph H., Rochester, Minnesota
(Member Saline County)
Jones, Richard A., St. Louis
Jones, Theodore R., Kansas City
Jones, Victor, Brentwood
Jones, Vincent L., St. Louis
Jordan, Edward J., St. Louis
Jordan, Walter R., St. Louis
Jorel, Louis E., Lebanon
(Member St. Louis Medical Society)
Jorstad, Louis H., St. Louis
Joseph, Harold J., Ladue
Joslyn, Harold L., St. Louis
Jost, Charles A., St. Louis
Jotte, Richard F., St. Ann
Juden, Alexander G., Cape Girdardeau
Judy, Joseph D., Ferguson
Jungk, Carl G. W., St. Louis
Justus, John B., Kansas City

K

Kahn, Lawrence, St. Louis
Kallenbach, Glen P., Mexico
Kamakas, Nicholas, Ferguson
Kanagowa, Hajime H., Jefferson City
Kane, Clyde E., St. Louis
Kane, R. Emmet, St. Louis
Kantor, Julius M., Kansas City
Kantor, Samuel, Kansas City
Kaplan, Albert, Normandy
Kappesser, Netajean B., St. Louis
Kappesser, Roland C., St. Louis
Karandjeff, Apostle D., St. Louis
Kardesch, Milton, St. Louis
Karl, Michael M., St. Louis
Karraker, Alvan G., Farmington
Karsh, Robert S., St. Louis
Kaskie, Clifford R., Clayton
Kasten, Melvin C., Cape Girardeau
Katz, Milton, Kansas City
Kauffman, Ruth, Versailles
Kaul, Philip G., Kansas City
Kealhofer, George C., Kansas City

Keats, Theodore E., Columbia
Keeble, Charles B., St. Louis
Keeler, James E., Kansas City
Keenoy, John J., St. Louis
Keffler, Karl L., St. Louis
Kehoe, John J., Ballwin
Keim, John H., Cape Girardeau
Keim, John P., St. Louis
Keith, Willis E., Kansas City
Keller, Joseph M., St. Louis
Keller, Louis, St. Louis
Keller, Maurice J., St. Louis
Keller, Robert M., Wentzville
Kellett, John G., Webster Groves
Kelley, Gilbert B., Savannah
Kelley, Isaac D., Jr., St. Louis
Kelley, Ralph R., Savannah
Kelley, Robert W., St. Louis
Kelley, Walter L., Affton
Kelling, Douglas G., Waverly
Kelling, George A., Waverly
Kelling, Jordan, Waverly
Kelly, Eugene H., Kansas City
Kelly, John B., St. Louis
Kelly, Marshall W., Jefferson City
Kelly, R. Emmet, St. Louis
Keltner, Raymond O., Address Unknown
Kempinsky, Warren H., St. Louis
Kendig, John H., St. Louis
Kendis, Joseph B., St. Louis
Kennard, George K., Kansas City
Kent, Bela K., Kansas City
Kent, Clifford F., Kansas City
Keown, Kenneth K., Columbia
Kepler, Earl C., Fulton
Kerr, David N., St. Louis
Kerr, Frank T., Monett
Kerr, Russell, Kansas City
Kessler, Joseph J., St. Louis
Ketcham, William M., Kansas City
Ketron, Marvin B., Kansas City
Kettelkamp, George D., St. Louis
Ketterman, Grace H., Hickman Mills
Ketterman, Herbert L., Kansas City
Kettner, Edward G., Kansas City
Key, James S., Springfield
Keyes, Edward L., St. Louis
Kibbe, Edgar A., California
Kibbe, John H., Monroe City
Kieber, Robert W., St. Joseph
Kieffer, Roland S., St. Louis
Kieffer, Victor B., Jr., St. Louis
Kiehl, Katharine, Joplin
Kienberger, Paul A., Kansas City
Kiene, Richard H., Kansas City
Kienzle, Edward C., St. Louis
Kilker, Clarence H., St. Louis
Kilker, Donald E., St. Louis
Kimball, Merritt H., Kansas City
Kimberlin, Herbert C., Trenton
Kimelman, Nathan, St. Louis
Kimes, Ira D., Cameron
Kinder, James A., Cape Girardeau
King, Elbert R., Boise, Idaho (Member West Central Counties)
King, Eustace E., III, St. Louis
King, Francis C., Kirkwood
King, James P., St. Louis
King, John V., St. Louis
King, Richard H., Clinton
King, Samuel J., St. Louis
King, Walter R., Kansas City
Kingsbury, Helen, Kansas City
Kingsland, Robert C., Clayton
Kinner, Helmuth M., St. Louis
Kinney, Max W., Mound City
Kinsella, Dalton L., Jr., New York, N. Y. (Member St. Louis Medical Society)
Kinsella, Edward D., St. Louis
Kinsella, Maria S., St. Louis
Kinsella, Peter W., St. Louis
Kinsella, Ralph A., St. Louis
Kinsella, Ralph A., Jr., St. Louis
Kipnis, David M., St. Louis
Kirchner, Walter C. G., St. Louis
Kirk, Charlie W., Hopkins
Kirschman, Robert E., Joplin
Kirstein, Melvin B., St. Louis
Kirtz, Louis P., Clayton
Kiser, David M., Kansas City
Kissane, John M., St. Louis
Kister, George E., St. Charles
Kistner, William F., University City
Kitchen, William M., Kansas City
Klaff, Daniel D., St. Louis
Klebba, Larry B., Jefferson City
Klein, Andrew G., St. Louis
Klein, Arnold G., St. Louis
Klein, Bert H., St. Louis
Klein, Edward H., Kansas City
Klein, Harry A., St. Louis
Kleinschmidt, Clinton, St. Louis
Klenk, Charles L., St. Louis
Klepinger, Dayton P., Kansas City
Klinge, Frederick W., St. Louis
Klingner, George M., Springfield
Klippel, Allen P., St. Louis
Klippel, Bernhardt W., St. Louis
Kloeppel, Carl F., Kirkwood
Klym, Nicholas, St. Louis
Knabb, Arthur D., Springfield
Knabb, Harris, Springfield
Knabb, Henry F., Springfield
Knabb, Henry F., Jr., Springfield
Knabb, Kenneth E., Springfield
Knapp, Rudolph, Poplar Bluff
Kneal, E. Ellsworth, St. Louis
Kneibert, Fred L., Poplar Bluff
Knepper, Paul A., St. Joseph
Knese, Luke A., St. Louis
Knight, Franklin P., St. Louis
Knight, John S., Kansas City
Knight, Lyle B., Lee's Summit
Knight, William A., Jr., St. Louis
Knipschild, B. F., Marshall
Knoch, H. Kermit, Kansas City
Knoke, Frederick W., Jr., St. Louis
Knopf, Keith, Bellflower, Calif. (Member Grand River Medical Society)
Knowlton, Norman P., Jr., St. Louis
Knox, Earl R., Kansas City
Koch, Robert E., Clayton
Koehler, Charles A., Kansas City
Koehler, John W., Joplin
Koenig, George H., St. Petersburg, Fla. (Member St. Louis Medical Society)
Koenig, Karl F., St. Louis
Koerner, Kenneth A., Clayton
Koessel, Arthur W., St. Louis
Kohler, Eugene J., St. Louis
Kohler, Louis H., St. Louis
Kohn, Cecil M., Kansas City
Kolze, Vernon W., Springfield
Komanetsky, William M., St. Louis
Konzelmann, John A., St. Louis
Koon, Bernard T., St. Louis
Kopp, Jules H., St. Louis
Kopp, Leonard J., St. Louis
Koppenbrink, Walter E., Jr., Higginsville
Korn, Robert L., Clayton
Korth, William M., Kansas City
Kotner, Lawrence M., St. Louis
Kountz, William B., St. Louis
Kouri, Martin F., St. Louis
Koutsoumpas, William V., St. Louis
Kovac, Albert P., N. Kansas City
Kowert, Edward H., St. Louis
Kozal, Francis L., Crystal City
Kozlowski, Albert E., St. Louis
Kraft, Edward O., Brentwood
Kraft, Jacob, Kansas City
Kramer, Fred, St. Louis
Kramolowsky, Helmuth H., St. Louis
Kraner, Justin F., St. Louis
Kranson, Seymour J., Independence
Kratz, Paul E., Cape Girardeau
Krebs, Joseph M., Clayton
Krebs, Otto S., St. Louis
Krieger, John L., St. Louis
Kromer, Charles, St. Louis
Kubitschek, Paul F., St. Louis
Kuebrich, Thomas C., Ferguson
Kuenzi, Donald E., Gashland
Kuhn, John R., Jr., Joplin
Kuhn, William F., II, Kansas City
Kulowski, Jacob, St. Joseph
Kurth, Robert K., St. Louis
Kutryb, Walter J., St. Louis
Kurz, Rudolph F., St. Louis
Kuttner, Marianne, St. Louis
Kyger, Fred B., Kansas City
Kyger, John E., Kansas City
Kyner, Thomas A., Kansas City

L

Lachance, Leopold, Centralia
Lacy, N. Eugene, Kansas City
Ladd, Charles B., St. Louis
Ladenson, Roland P., Columbia
LaDriere, Raymond J., St. Louis
Laffoon, France L., Vista, Calif. (Member Jackson County)
LaHue, Lilburn D., Butler
Lakes, John D. Litchfield, Ill. (Member St. Louis Medical Society)
Lally, James J., Kansas City
Lam, Robert L., St. Louis
Lamar, Robert F., Kansas City
Lamb, F. Patrick, Belleville, Ill. (Member St. Louis Medical Society)
Lamb, Wanda, St. Louis
Lamb, Woodrow M., Paragould, Ark. (Member Pemiscot County)
Lambert, Marian, Hickman Mills (Member Grand River Medical Society)
Lamke, Charles M., Columbia
Lamson, Roy C., Neosho
Lamy, John E., Sedalia
Landau, Daniel B., Hannibal
Landau, William M., St. Louis
Landis, George K., Kansas City
Landree, James C., St. Louis
Lane, Clinton W., St. Louis
Laney, Ronald L., Oceanside, Calif (Member Jasper County)
Langan, William J., Jr., St. Louis
Lange, Adolph C., St. Louis
Langeluttig, Harry V., Mt. Vernon
Langhus, Melvin O., N. Kansas City
Langston, Walter R., Springfield
Lanier, Earl W., St. Louis
Laning, J. Halcombe, Kansas City
Lankford, Harold D., Mexico
Lanning, Richard C., Ste. Genevieve
Lanning, Robert J., Hannibal
Lansche, Elmer A., St. Louis
Lansche, W. Edward, St. Louis
Lapi, Angelo, Kansas City
Lapi, Ruth M., Kansas City
Lapp, Harry C., Kansas City
Larimore, Joseph W., St. Louis
Larkin, Rosemary R., St. Louis
Larsen, Kenneth V., St. Louis
Larson, Paul U., St. Louis
LaSalle, Michael W., Kansas City
Lassar, Gilbert N., St. Louis
Latham, Kenyon S., California
Latham, Raymond W., Kansas City
Lattinville, Henry E., St. Louis
Lau, Gustav A., St. Joseph
Laurenzana, Frank P., Kansas City
Lawless, Charles L., Marshall
Lawrence, George H., St. Louis
Lawrence, John R., Marshall
Lawrence, John V., St. Louis
Lawton, John T., St. Louis
Lawton, Lawrence M., St. Louis
Lawton, Thomas P., St. Louis
Lay, Obert M., Clayton
Layton, Ira C., Kansas City
Leahy, John G., Clayton
LeBlanc, Leo J., St. Louis
Lederer, Charles M., Warrensburg
Lederman, Joseph, St. Louis
Lee, George C., Kansas City
Leech, Charles A., Columbia
Leech, Maurice P., Fayette
Legner, Stanley G., Perryville
Lehner, Richard L., Kansas City
Leidinger, Karl J., Republic
Leifer, William W., Kansas City
Leitch, Cecil G., Blue Springs
Leitz, Frank B., Kansas City
Lembeck, Joseph A., St. Louis
Lemire, Robert W., Sedalia
Lemmon, George B., Springfield
Lemmon, G. Bruce, Jr., Springfield
Lenobel, Milton I., Clayton
Lentz, Clark H., Kansas City
Lentz, Harold C., Neosho
Leo, William A., Kansas City
Lerner, Abe F., Clayton
Lerwick, Everett R., St. Louis
Leslie, Charles H., Kirkwood
Leslie, James F., Springfield
Leslie, J. Paul, Jefferson City
Leslie, James T., Jefferson City
Levey, Harry B., Kansas City
Levey, Simon A., St. Louis
Levin, Marvin E., University City
Levin, Sidney S., St. Louis
Levine, Ervan L., Vandalia
Levitt, Joseph, St. Louis
Levy, Irwin, St. Louis
Lewellen, Charles H., Louisiana
Lewellen, Charles P., Louisiana
Lewin, Wilbur H., St. Louis
Lewis, James E., Jr., St. Louis
Lewis, Ray B., Columbia
Lewis, Revis C., Kansas City
Ley, Albert P., St. Louis
Leydig, Stanley M., St. Louis
Lichtor, Alexander, Kansas City
Lichtor, Joseph M., Kansas City
Lichty, Charles A., Shelbina
Lieb, Francis X., St. Louis
Lieb, Otto, St. Louis
Lieberman, B. Albert, Jr., Kansas City
Lieberman, David M., St. Louis
Liebmann, Fritz, M., St. Louis
Liersch, Joseph C., Kansas City
Liese, Grover B., St. Louis

Liggett, Hiram S., St. Louis
Lilly, Terry E., Kansas City
Lilly, Terry E., Jr., Kansas City
Limbaugh, Walter R., Hayti
Lindeman, Carl H., St. Louis
Lindquist, Carl N., Kansas City
Lindsay, John W., Conway
Link, Alexander J., St. Louis
Link, Vance E., Independence
Linton, Clair S., Kennett
Linville, Howard E., Kansas City
Lipschitz, Ervin, Clayton
Lipsitz, Ellis S., St. Louis
Lischer, Carl E., St. Louis
Lissack, Edmund, Concordia
Liston, Odus, Oakgrove
Littauer, David, St. Louis
Little, Monroe H., St. Louis
Littmann, Lewis E., St. Louis
Litton, Lyle D., Springfield
Litzow, Louis T., St. Louis
Locker, George E., Iantha
Lockhart, Charles E., Springfield
Lockwood, William E., Slater
Lodwick, Gwilym S., Columbia
Loeb, Virgil, Jr., St. Louis
Loeffel, Ellen S., St. Louis
Loewy, Louise B., Kansas City
Logan, James A., Warsaw
Logue, John, Columbia
Lohr, Curtis H., St. Louis
Lohr, Robert W., Florissant
Lohrentz, Lois H., Kansas City
Loitman, Bernard, St. Louis
Londe, Sol, St. Louis
London, Stanley L., St. Louis
Lonergan, Warren M., St. Louis
Long, David S., Harrisonville
Long, Forrest C., Savannah
Long, Frank B., St. Louis
Long, Frank B., Sedalia
Long, Robert S., Kansas City
Longenecker, Joe L., Joplin
Lonsway, Maurice J., St. Louis
Lonsway, Maurice J. Jr., St. Louis
LoPiccolo, Vincent J., St. Louis
Lord, Richard E., St. Louis
Lottes, James O., St. Louis
Loughead, John R., Poplar Bluff
Lourie, Herbert, St. Louis
Love, Drury M., Kansas City
Love, Robert W., Jr., Kansas City
Love, Walter S., Nevada
Loving, B. Rush, Ballwin
Lovinggood, Thomas A., Cape Girardeau
Lowe, Alvin L., Sedalia
Lowe, Horace A., Springfield
Lowe, Horace A., Jr., Springfield
Lowell, Paul, Kansas City
Lowenstein, Paul S., St. Louis
Lowney, John F., Columbia
Lowrey, Ford J., Kansas City
Loyd, Earl L., Jefferson City
Loyd, Herlan O., Jefferson City
Lucas, John H., Brookfield
Lucido, Joseph L., St. Louis
Lucke, Eugene M., Hannibal
Luckenbill, Paul T., Plattsburg
Luckey, Horace L., Maplewood
Luedde, Fullerton W., St. Louis
Luedde, Philip S., St. Louis
Luh, Andrew, St. Louis
Luman, Frank E., Edina
Lund, Herluf G., St. Louis
Lund, Robert H., Clayton
Lundgren, Fred H., Jr., Kansas City
Luppens, Albert F., Lee's Summit
Lurie, Harold H., Springfield
Lusk, Charles A., Jr., Butler
Luten, Drew W., St. Louis
Luter, Carter W., Butler
Lutkewitte, Joseph F., St. Marys
Lutz, Martin H., St. Louis
Lyddon, Harold R., Jr., Kansas City
Lyle, Ray M., Grandview
Lyle, Robert R., Versailles
Lyman, Edward H., St. Louis
Lynxwiler, Chester P., St. Louis
Lytle, J. E., Mammoth Springs, Ark.
  (Member South Central Counties)
Lytle, William R., Rolla
Lyttle, Garnet C., St. Louis
Lytton, George J., Kansas City
Lytton, William B., Clayton

Mc

McAdam, Charles R., St. Louis
McAdoo, Hosea W., Springfield
McAfee, Alan C., St. Louis
McAlester, Andrew W., III, Kansas City
McAlhany, Howard J., Springfield
McArtor, Thomas R., Browning
McBurney, Charles A., Slater
McCall, Edwin L., Brentwood
McCalla, John P., Kansas City
McCallum, Andrew J. C., Aurora
McCann, John F., St. Louis
McCann, Louis P., Nevada
McCanse, Raymond A., Kansas City
McCarroll, Henry R., St. Louis
McCarthy, Eugene F., St. Louis
McCarthy, John M., St. Louis
McCarthy, Thomas D., Ferguson
McCarthy, Wm. F., Blue Springs
McCaughan, John M., St. Louis
McClanahan, Robert C., Kansas City
McCloskey, R. Bruce, Webster Groves
McClure, David N., Clayton
McClure, Thomas C., Sikeston
McConchie, James E., Independence
McCorkle, E. Lee, Marshall
McCormick, James E., Kansas City
McCoy, Frederick J., Kansas City
McCoy, Warren R., Caruthersville
McCracken, Samuel R., Excelsior Springs
McCraw, Doyle C., Bolivar
McCubbin, Clarence R., Kansas City
McCubbin, J. Burleigh, New York, N. Y.
  (Member Callaway County)
McCullough, Campbell C., Kansas City
McCunniff, Wm. B., Kansas City
McDaniel, John R., St. Joseph
McDermott, Alfred E., Perryville
McDonald, Bruce P., Kansas City
McDonald, Eugene F., Jackson
McDonald, George H., St. Louis
McDonald, Terrence J., Tipton
McDonald, Victor G., Jr., Kansas City
McDonald, Wilbur P., St. Joseph
McDonnell, John F., Kansas City
McDowell, Frank S., St. Louis
McElroy, Glenn L., Columbia
McElvain, Robert C., St. Louis
McFadden, James F., Farmington
McFadden, James F., Jr., St. Louis
McFarland, Morris D., Kansas City
McGannon, Paul T., Kansas City
McGinnis, Byron J., St. Louis
McGinnis, William F., Clayton
McGinty, Charles P., Cape Girardeau
McGlothlan, Arthur B., St. Joseph
McHale, Thomas C., Kansas City
McHaney, John W., Jefferson City
McIntire, Emery J., Carthage
McIntyre, A. N., Clinton
McKaskle, Clarence W., Caruthersville
McKee, Jos. W., Kansas City
McKee, Oliver A., Kirkwood
McKee, Wallace P., Kansas City
McKinstry, Karl V., DeSoto
McKnelly, William V., Jefferson City
McLain, B. M., Poplar Bluff
McLean, Harry A., St. Louis
McLean, Royal C., Kirkwood
McLelland, Richard I., University City
McLeod, John, Kansas City
McMahan, John H., St. Louis
McMahon, Alphonse, St. Louis
McMahon, Bernard J., Clayton
McManamon, Thomas V., Ferguson
McMillan, Thomas E., Kansas City
McMurray, Herbert C., Ballwin
McMurtry, Leonard K., Moberly
McNalley, Frank P., Clayton
McNalley, Michael, St. Louis
McNamara, John J., Florissant
McNamee, Owen J., St. Louis
McNamee, William F., St. Louis
McNearney, Joseph, St. Louis
McNeel, Lee A., Jr., Greenfield
McNew, William T., Carthage
McPhee, William R., Kansas City
McPheeters, James W., Poplar Bluff
McPheeters, James W., Jr., Poplar Bluff
McPherson, Owen P., Kansas City
McPike, Lloyd H., Joplin
McSwiney, John G., St. Louis
McVay, James R., Kansas City
McVay, James R., Jr., Kansas City

M

Maas, Hermann, St. Louis
Mabrey, John P., Plattsburg
Macauley, Bernard J., Poplar Bluff
MacBryde, Cyril M., Kirkwood
Macdonald, William C., St. Louis
Macdonnell, Carey R., Marshfield
Macdonnell, Thomas M., Marshfield
Machek, Otakar, St. Louis
MacInnis, Florence E., Kansas City
Mack, Mary L., address unknown
Mack, Robert E., St. Louis
Macko, Joseph R., St. Louis
Maclean, John A., Los Angeles, Calif.
  (Member Jackson County)
MacNaughton, Robert A., Kansas City
Macnish, James M., St. Louis
Macon, William L., Jr., St. Louis
Maddox, Albert R., Sedalia
Maddox, John D., Joplin
Maddux, William P., Springfield
Madison, Waite H., Marshall
Magee, Charles D., St. Louis
Magee, Robert L., El Dorado Springs
Magee, William E., St. Louis
Magidson, Joseph, Clayton
Magill, Joseph S., Milan
Magness, Guy N., University City
Magness, William C., Branson
Magnin, Richard L., St. Joseph
Mahe, George A., Clayton
Maher, Robert W., Springfield
Maher, Thomas F., St. Louis
Mairs, Edgar J., Trenton
Maizus, Saul H., St. Louis
Major, Hermon S., Kansas City
Makous, Norman, Independence
Malinoski, Mitchell V., Poplar Bluff
Malles, A. Conrad, St. Louis
Mandler, George, Chillicothe
Manganaro, Frank J., St. Louis
Mangels, Kenneth A., Independence
Manion, Peter J., St. Louis
Mannis, Ben G., St. Louis
Mansur, Edward E., Miami, Fla.
  (Member Cole County)
Manting, George, St. Louis
Maple, Francis M., Springfield
Maples, Floyd H., Mt. Vernon
Marcus, Morris D., St. Louis
Markel, Arthur D., Poplar Bluff
Marks, Mark M., Kansas City
Marmor, William A., St. Louis
Mars, Hartley F., Forsyth
Marsh, Alice, Kansas City, Kans.
  (Member Jackson County)
Marshall, Alfred H., Charleston
Marshall, Cameron F., Kansas City
Marshall, Wilbur J., Springfield
Marston, Warren G., St. Louis
Martin, Andrew D., Sikeston
Martin, Charles E., Ferguson
Martin, Forrest L., Nevada
Martin, Frederick W., Jr., St. Louis
Martin, John N., St. Joseph
Martin, Maynard W., Houston, Texas
  (Member St. Louis Medical Society)
Martin, Raymond T., St. Louis
Martin, Wilfred E., Odessa
Martin, W. Joe, Louisiana
Martt, Jack M., Columbia
Martz, John C., Webster Groves
Mason, Roy E., St. Louis
Massie, Edward, St. Louis
Masters, William H., St. Louis
Mastin, E. Vernon, St. Louis
Masucci, Joseph M., Kansas City
Mathewson, Hugh S., Kansas City
Matteson, Frank B., Grant City
Matthews, John G., St. Louis
Matthews, John I., Jefferson City
Mattis, Robert D., Clayton
Maughs, Sidney B., St. Louis
Max, Paul F., St. Louis
Maxey, Hugh W., Jefferson City
Maxson, T. Reed, Warrensburg
Maxwell, Richard W., University City
May, Albert L., Jr., Poplar Bluff
May, Benjamin F., St. Louis
May, James W., Kansas City
Mayer, John H., Jr., Kansas City
Mayer, Robert A., St. Louis
Mayfield, James L., Crystal City
Mays, Frank G., Washington
Maze, Lawrence E., St. Louis
Mazur, Herbert A., University City
Mead, Samuel T., Slater
Meador, James R., Clayton
Meagher, Arthur J., St. Louis
Meares, Cecil H., Jr., Joplin
Medler, Francis J., St. Louis
Mehan, George T., St. Louis
Meier, Francis X., Jefferson City
Meinberg, William H., St. Louis
Meiners, Edwin P., St. Louis
Meiners, Theodore M., Webster Groves
Meinershagen, C. W., Jefferson City
Meisenbach, A. Edward, St. Louis
Melgaard, S. Ross, Kansas City, Kansas
  (Member Jackson County)
Melick, William F., St. Louis
Meluney, Solomon E., St. Joseph
Mendelson, David F., St. Louis
Mendonsa, Elsa L., University City

Mendonsa, Lawrence E., St. Louis
Menne, Marvin G., Ironton
Merenda, Sam J., St. Louis
Meriwether, Don R., Mission, Kansas
(Member Jackson County)
Merklin, Anton L., St. Louis
Merrims, Theodore, University City
Merritt, Burch A., St. Louis
Merryman, Charles H., Senath
Merz, Jean J., St. Louis
Mestres, Hugh M., St. Louis
Metz, Charles O., St. Louis
Meyer, Claude B., Nixa
Meyer, Curtis A., St. Louis
Meyer, Herman M., St. Louis
Meyer, James E., Ballwin
Meyer, Oscar D., St. Louis
Meyer, Paul W., Kansas City
Meyerhardt, Milton H., St. Louis
Meyers, Harold L., Kansas City
Meyers, John B., St. Louis
Meyers, Montague M., St. Louis
Mezera, Raymond A., University City
Michael, Kenneth D., St. Louis
Michael, Vernon E., St. Louis
Michaelis, Charles E., Fredericktown
Michaelree, John F., Maplewood
Middleman, Isadore C., St. Louis
Middleton, John W., Louisiana
Mier, Thomas M., St. Louis
Milder, Benjamin, St. Louis
Miles, George O., Kansas City
Miles, Paul W., St. Louis
Miller, Charles, Jr., Kirkwood
Miller, Charles W., St. Louis
Miller, Clinton L., Lee's Summit
Miller, Clyde S., Waynesville
Miller, D. Herbert, Montgomery, Ala.
(Member Chariton-Macon-Monroe-Randolph Counties)
Miller, David V., Poplar Bluff
Miller, Gerald L., Kansas City
Miller, Harold W., Willow Springs
Miller, Howard S., Macon
Miller, James E., St. Louis
Miller, Leroy J., Columbia
Miller, Norman C., St. Louis
Miller, Oliver J., Cape Girardeau
Miller, Wade H., Kansas City
Miller, Walter P., Kansas City
Miller, Wilson H., Kansas City
Millikin, Lester A., St. Louis
Mills, Warren B., St. Louis
Milster, Clyde R., St. Louis
Miltenberger, Paul C., Kennett
Minnihan, Robert W., St. Louis
Minton, Robert S., St. Joseph
Missey, Wilburn C., Jr., Creve Coeur
Mitchell, Andrew D., Kansas City
Mitchell, Ernest, Goodman
Mitchell, Robert H., Kansas City
Mitchell, Roy E., Salem
Mixson, William C., Kansas City
Modlin, John J., Columbia
Moeller, Carl E., St. Louis
Moen, Berwyn H., St. Joseph
Mohs, Frank R., Columbia
Molden, Charles A., St. Louis
Molholm, Hans B., Little Rock, Ark.
(Member St. Louis Medical Society)
Monahan, Elmer P., Lenexa, Kansas
(Member Jackson County)
Monat, Seymour, St. Louis
Montani, Charles, St. Louis
Montello, Samuel A., Kansas City
Montgomery, Austin F., St. Louis
Montgomery, James G., Kansas City
Montgomery, John S., Milan
Moody, Jackson C., Harrisonville
Mooney, Justin L., Kansas City
Mooney, Marcel L., Kansas City
Moore, Carl V., St. Louis
Moore, Harry G., St. Louis
Moore, Robert A., Kansas City
Moore, Sherwood, Steelville
(Member St. Louis Medical Society)
Moore, Walter L., Clayton
Moore, William E., Normandy
Moranville, Benedict A., Columbia
Morest, F. Stanley, Kansas City
Morfit, John C., Clayton
Morgan, David B., Kansas City
Morgan, Harry C., St. Louis
Moriarty, Lauren R., Kansas City
Morrin, Kevin C., St. Louis
Morris, Clyde L., Caruthersville
Morris, Harvey E., St. Louis
Morris, Mary E., St. Louis
Morrison, Donald H., Kansas City
Morrison, George B., Nevada
Morrison, T. A., Aurora
Morrow, Raymond L., Kansas City
Morroway, James H., St. Joseph
Morse, Marvin, St. Joseph
Mortensen, Frede, St. Louis
Morton, Paul C., Springfield
Moseley, F. Thomas, Springfield
Moses, Robert A., St. Louis
Moss, Paul, Kansas City
Mosser, Robert S., Kansas City, Kansas
(Member Jackson County)
Mothershead, John L., St. Joseph
Mott, James R., Hartville
Motzel, Albert J., St. Louis
Mountjoy, Grace S., St. Louis
Mowrey, William O., St. Louis
Moyer, Carl A., St. Louis
Muckerman, Richard I. C., St. Louis
Mudd, James L., St. Louis
Mueller, Clarence E., St. Louis
Mueller, Joseph A., St. Louis
Mueller, Martin J., Kansas City
Mueller, Morris A., Clayton
Mueller, Robert, St. Louis
Mueller, Robert J., St. Louis
Mueller, Wilbur K., St. Louis
Muench, Albert H., St. Joseph
Muench, Ludwig O., Washington
Muether, Raymond O., St. Louis
Mullarky, Wilbur A., St. Louis
Mullen, Jack, Bonne Terre
Mullen, Leo M., Kansas City
Mulligan, Leo V., St. Louis
Mullinax, Orr, St. Joseph
Mullins, Bernard L., North Kansas City
Multhauf, Cyril J., Kansas City
Mundy, Homer F., St. Joseph
Mundy, William L., Kansas City
Munsch, Augustin P., St. Louis
Munsch, Girard A., St. Louis
Murphy, Bernard L., Hannibal
Murphy, George E., St. Louis
Murphy, James P., St. Louis
Murphy, John C., St. Louis
Murphy, John P., St. Louis
Murphy, Paul, St. Louis
Murphy, Robert J., Kansas City
Muschany, Norman K., St. Louis
Musgrave, David E., Excelsior Springs
Musick, James D., Springfield
Mutshnick, Clara P., St. Louis
Myers, James M., Rolla
Myers, John S., Kansas City
Myers, Robert M., Kansas City
Myers, Wilson A., Kansas City

N

Nakada, James R., St. Louis
Napper, Marvin L., Springfield
Narahara, Hiromichi T., St. Louis
Naryka, Joseph J., St. Louis
Nash, Francis P., St. Louis
Nash, Helen E., St. Louis
Nash, Homer E., Jr., St. Louis
Nash, W. Hampton, St. Louis
Nathan, Lester J., St. Louis
Natoli, Cornelius A., St. Louis
Neal, M. Pinson, Columbia
Needels, Orval T., Kansas City
Neilson, Arthur W., St. Louis
Neilson, Arthur W., Jr., St. Louis
Nelson, Bentley A., Kansas City
Nelson, Charles S., Westphalia, Kans.
(Member Jackson County)
Nelson, Fred L., St. Joseph
Nelson, J. Roger, Brentwood
Nemec, Stanley S., St. Louis
Ness, Carl K., St. Joseph
Nesselrode, John H., Independence
Nester, Charles A., St. Louis
Netherton, George F., Cameron
Neu, Leo T., St. Louis
Neubeiser, Ben L., St. Charles
Neun, W. F., St. Louis
Newman, Mary Jane, Cassville
Newman, Percy, St. Louis
Newport, Gerald, University City
Newton, William T., St. Louis
Nibbe, Albert F., Bethany
Nichols, Charles E., Marlin, Texas
(Member St. Louis Medical Society)
Nichols, Frank J., Fulton
Nicholson, Ralph L., Excelsior Springs
Nickel, James F., St. Louis
Nickson, Charles E., Jr., Independence
Nicolai, Charles H., St. Louis
Nicolay, Kenneth S., Kansas City
Niedermeyer, Edward L., Tarkio
Niedermeyer, Frederick P., Kansas City
Niedermeyer, George J., St. Louis
Niesen, Frank J., St. Louis
Nigro, Dominic M., Kansas City
Nigro, E. Robert, Kansas City
Nigro, Joseph A., Kansas City
Nista, Joseph A., St. Louis
Nix, Winston K., Marshall
Nixon, Edward E., Gallatin
Noah, Joseph W., St. Louis
Nofles, James W., St. Louis
Nolan, Charles J., St. Louis
Noller, Henry W., St. Louis
Noltensmeyer, Milton N., Kansas City
Norman, Robert M., Ava
Northup, Glenn R., St. Louis
Norton, Wm. H., St. Louis
Nuetzel, John A., St. Louis
Nunn, Pat M., Kansas City, Kansas
(Member Jackson County)
Nunnelly, Gordon M., Cape Girardeau
Nussbaum, Paul B., Cape Girardeau
Nussbaum, Robert A., St. Louis
Nye, Robert S., St. Louis

O

Oakley, John E., Clayton
Obermeyer, Charles G., St. Louis
O'Brien, Edward C., St. Louis
O'Brien, Harry F., Mexico
O'Brien, James A., Muskogee, Oklahoma
(Member Greene County)
O'Brien, Leo A., Kansas City
O'Brien, Raymond W., Kansas City
O'Brien, Robert M., St. Louis
O'Connell, Frank A., Kansas City
O'Connell, Gerald L., Grandview
O'Connell, John, St. Louis
O'Connor, Robert J., Florissant
O'Connor, Wm. B., St. Joseph
O'Dell, Timothy T., Oran
O'Donnell, Joseph V., St. Louis
O'Dowd, James A., St. Louis
Oehler, William F., Cape Girardeau
Oetter, Donald L., St. Louis
Ogilvie, John H., Gravois Mills
Oglevie, Rial R., Kansas City
Ogura, Joseph H., Ladue
O'Hearne, John J., Kansas City
Ohmoto, Masao, St. Louis
O'Keefe, Joseph D., St. Louis
O'Leary, James L., St. Louis
Olive, George C., Neosho
Oliver, George A., Farmington
(Member St. Louis Medical Society)
Olmsted, Wm. H., St. Louis
O'Malley, Eugene J., St. Louis
O'Malley, James F., Kansas City
O'Neal, Lawrence W., St. Louis
O'Neal, Patricia, St. Louis
O'Neil, James H., Kansas City
O'Neill, John B., St. Louis
Oppenheimer, Henry E., Clayton
O'Reilly, D. Elliott, Clayton
Orenstein, Joseph M., St. Louis
Orgel, M. Norman, St. Louis
Osborne, Chas. D., Sedalia
Osgood, George M., Prairie Village, Kan.
(Member Jackson County)
Ossman, Julian A., Jefferson City
O'Sullivan, George A., St. Louis
Ott, Harold J., Maplewood
Ottensmeyer, Charles D., Overland
Otto, Thomas G., Cape Girardeau
Overesch, Harry B., Kansas City
Overholser, Milton D., Columbia
Owen, James W., Jr., St. Louis
Owen, Robert F., St. Louis
Owens, Graham J., Kansas City
Owens, Hugh H., Kansas City
Owens, Michael J., Kansas City
Owens, Richard L., Kansas City
Owens, Robert H., Kansas City
Ozar, Milton B., Kansas City

P

Paddock, Charles S., Joplin
Paddock, Richard, St. Louis
Padfield, Earl G., Jr., Kansas City
Page, Jesse W., Clayton
Paine, Robert, St. Louis
Painter, Andrew E., Portageville
Painter, Lattie B., Jr., Portageville
Pakula, Sidney, Kansas City
Palazzo, Frank A., St. Louis
Palcheff, Chris L., Springfield
Palenske, Robert L., Hornersville
Paletta, Francis X., St. Louis
Pallett, Harold A., Kansas City
Papp, Sandor D., Joplin
Parashak, Paul M., St. Louis
Parato, John M., St. Louis
Pareira, Morton D., Clayton
Paris, William H., St. Louis
Park, George M., Eureka

Park, William I., Jr., Springfield
Parker, Arthur C., Jr., Poplar Bluff
Parker, Elmer L., Kansas City
Parker, H. Graham, Platte City
Parker, Hubert M., Kansas City
Parker, Robert H., North Kansas City
Parker, Thomas W., University City
Parker, William, St. Louis
Parkhurst, Charles L., Houstonia
Parks, Stephen, Bloomfield
Parsons, Ernest H., St. Louis
Parsons, Eugene O., Kansas City
Pascoe, James J., Nevada
Passanante, Bartholomew M., St. Louis
Passman, Harold, Kansas City
Pate, Otho S., North Kansas City
Patterson, Donald R., Joplin
Patterson, Grover S., Carthage
Patterson, John R., Kansas City
Patterson, William R., Warrensburg
Patterson, William W., Kansas City
Patton, Leslie E., St. Louis
Pawol, S. E., St. Louis
Payne, Bryan T., Lexington
Payne, John W., Columbia
Payne, Meredith J., St. Louis
Pearl, John F., St. Clair
Pearse, Roy W., Jr., Nevada
Pearson, Paul E., Kansas City
Peck, Chester R., Jr., Kennett
Peckham, John W., St. Louis
Peden, Burnet W., Clayton
Peden, Joseph C., St. Louis
Peden, Joseph C., Jr., St. Louis
Peeler, James O., St. Louis
Peete, Don C., Kansas City
Pelz, Mort D., St. Louis
Penn, Robert M., Silex
Penney, David L., St. Louis
Penninger, William H., Springfield
Pennington, Francis E., St. Louis
Pennoyer, James, St. Louis
Perll, Maurice F., Kansas City
Perll, Rita D., Kansas City
Perna, Vincent P., Columbia
Pernoud, Flavius G., Jr., St. Louis
Pernoud, Michael F., St. Louis
Perry, David C., Mound City
Perry, H. Mitchell, Kirkwood
Perry, John M., Princeton
Perry, Ralph, Kansas City
Perry, William D., St. Louis
Peters, Evelyn L., Kansas City
Petersen, Harold E., St. Joseph
Peterson, Carl M., Kansas City
Peterson, George L., Kansas City
Peterson, Milton C., Kansas City
Peterson, Stanley S., Springfield
Peterson, Walter R., Kansas City
Petry, Ezra L., Kansas City
Peugnet, Hubert B., St. Louis
Pfeffer, Robert I., St. Joseph
Pfeifer, Oliver C., St. Louis
Pfuetze, Edwin L., Kansas City
Phillips, Hanford, St. Louis
Piccione, Leonard M., St. Louis
Pickard, Clarence M., Columbia
Pickard, Nicholas S., Kansas City
Pickens, E. Allen, Nevada
Pickens, Edgar E., Kansas City
Pickrell, Claude D., St. Louis
Pierron, John B., Kansas City
Pifer, Lawrence H., St. Joseph
Pileggi, Felix A., North Kansas City
Pingelton, William B., Columbia
Pinsker, Oscar T., Overland Park, Kan.
(Member Jackson County)
Piper, August T., St. Louis
Piper, Donald K., Kansas City
Pipkin, Garrett, Kansas City
Pittam, Radford F., Hutchinson, Kansas
(Member Jackson County)
Plag, Albert F., St. Louis
Platt, William R., Clayton
Platz, John H., Carrollton
Plesons, John D., St. Louis
Ploehn, Emma, St. Louis
Plumlee, William C., Springfield
Plumpe, W. Tupper, St. Louis
Poff, Joseph H., Albany
Poggemeier, William H., Jr., St. Charles
Polk, George M., Lee's Summit
Polk, John W., Springfield
Pollack, Maxwell A., St. Louis
Pollock, Leo H., Kansas City
Poor, Carl W., Neosho
Poorman, Bert A., Kansas City
Popp, Carl G., Sikeston
Porporis, Arthur A., St. Louis
Porter, Louis, Kansas City
Porter, Russell, Tucson, Arizona
(Member Clay County)
Portuondo, Bonaventura C., St. Louis
Post, Cyril A., Poplar Bluff
Post, John P., Washington
Post, M. Hayward, St. Louis
Post, Winfred L., Joplin
Potashnick, Robert, St. Louis
Potter, Allen B., Bowling Green
Potter, Caryl A., Jr., St. Joseph
Potter, Lee G., Kansas City
Potter, Reese H., St. Louis
Potter, Thompson E., St. Joseph
Powell, Carl A., St. Louis
Powell, Earl A., St. Louis
Powell, Edwin M., Springfield
Powell, Nelson E., Kansas City
Powell, Rudolph V., St. Louis
Powers, John M., Kansas City
Powers, Pierce W., St. Louis
Pranger, Sylvester H., St. Louis
Prater, Bill G., Springfield
Prentiss, Harry S., Kansas City
Presnell, Cleitus A., St. Louis
Press, Maurice J., St. Louis
Preston, Albert, Jr., Kansas City
Price, Charles H., Cassville
Price, Kenneth C., St. Louis
Price, Robert P., St. Joseph
Printz, Joseph H., Kansas City
Printz, Otto J., Kansas City
Probstein, Jacob G., St. Louis
Proctor, Donald C., Sedalia
Proetz, Arthur W., St. Louis
Pruett, Burchard S., St. Louis
Pruett, Hubert S., St. Louis
Pruett, Paul L., Springfield
Pucci, Gregory L., Kansas City
Puckett, Cordelia, St. Louis
Pugh, Richard G., Independence
Pullen, Roscoe L., Columbia
Purcell, Elmer M., Springfield
Purcell, Harry K., St. Louis
Pyne, Herbert S., St. Louis

Q

Quer, Erich A., Kansas City
Quintana, Manuel M., Chicago, Ill.
(Member Perry County)
Quistgard, Paul C., Kansas City

R

Rachlin, Maxwell, Brentwood
Rader, Ada B., Martin City
Rader, George B., St. Louis
Raemdonck, Alphonse J., St. Louis
Ragland, John E., Ballwin
Ragsdale, George M., Paris
Rainey, Robert, St. Louis
Rainwater, Elmer H., Springfield
Ramey, Ehret O., Kansas City
Ramos, John F., Jr., Kansas City
Ramos, Raoul L., St. Louis
Ramsey, Robert H., Ferguson
Randall, Don Q., St. Charles
Randall, Leslie, Licking
Rannie, Paul R., Independence
Ransdell, James F., Columbia
Rapp, Earl L., Hannibal
Rapp, Harold B., Cape Girardeau
Rathle, Henri, New Orleans, La.
(Member St. Louis County)
Rawlins, Fred E., Cape Girardeau
Rawlins, Kelly, Holden
Ray, C. Thorpe, Columbia
Ready, James H., St. Louis
Reas, Herman W., St. Louis
Rector, Joe L., Jr., Kansas City
Redington, James C., Jr., Clayton
Redmond, William, St. Joseph
Reeder, Charles C., New Madrid
Reese, A. Victor, Webster Groves
Reh, Edward P., St. Louis
Reich, Harry A., St. Louis
Reich, Oliver F., Kimmswick
Reichert, M. Cecelia, St. Louis
Reiches, Aaron J., St. Louis
Reichman, John J., Hannibal
Reid, James A., Marshall
Reid, William F., Richmond, Va.
(Member St. Louis Medical Society)
Reider, Richard A., St. Louis
Reilly, Leo J., St. Louis
Reilly, Pierce J., St. Louis
Reineck, John A., St. Louis
Reinhard, Edward H., St. Louis
Reinhardt, George R., Kansas City
Reis, Carl J., St. Louis
Reiss, Eric, University City
Reister, Dorothy D., Kansas City
Reister, Philip D., Kansas City
Reitman, Stanley, University City
Reitz, Carl H., Kansas City
Remley, George C., Kansas City
Rendleman, George F., St. Louis
Rennard, Marvin, St. Louis
Repetto, Albert M., St. Louis
Repp, Theodore J., St. Louis
Reser, Thomas S., Cole Camp
Reuter, Louis A., St. Louis
Revare, Paul, North Kansas City
Reynolds, Fred, St. Louis
Reynolds, Garland A., Cape Girardeau
Reynolds, James R., Neosho
Rhoades, Arthur B., Kansas City
Rhodes, Euhlan L., Warsaw
Rice, Carl E., Hillsboro
Rice, Earl R., Ft. Lauderdale, Fla.
(Member St. Louis Medical Society)
Rice, Grover C., Brunswick
Richards, Frank O., St. Louis
Richardson, George A., Union
Richardson, Marion W., Kansas City
Richardson, Reginald G., Jefferson City
Richardson, William R., Union
Richman, Elmer, St. Louis
Richter, William B., Stockton
Riddell, Richard V., St. Joseph
Ridings, Harold D., Cape Girardeau
Ries, Douglas A., Richmond Heights
Riffel, Gordon W., New York, N. Y.
(Member Henry County)
Rifkin, Shale M., St. Louis
Riggio, Salvatore N., St. Louis
Rigney, Levi M., Springfield
Riley, Fred P., Perryville
Riley, John J., St. Louis
Riley, Ralph D., St. Louis
Riley, Ralph W., Lexington
Riley, William H., St. Louis
Riller, Lowell E., Kansas City
Ringo, Henry J., St. Louis
Rinkel, Herbert J., Kansas City
Riordan, Lawrence M., St. Louis
Ritchie, Frances R., St. Louis
Ritter, Hubert A., St. Louis
Ritter, Raymond A., Cape Girardeau
Ritterbusch, James K., Fulton
Roberson, John H., Lilbourn
Roberts, Grosvenor G., Kansas City
Roberts, Harold K., Clayton
Roberts, Harold M., Kansas City
Roberts, John P., Kirkwood
Roberts, John R., St. Louis
Roberts, Lacy M., Kansas City
Roberts, Paul A., Sweet Springs
Roberts, Sam E., Kansas City
Robertson, Frank G., St. Louis
Robertson, George D., Tucson, Arizona
(Member St. Louis Medical Society)
Robertson, LeRoy L., St. Louis
Robichaux, Eugene B., Excelsior Springs
Robichaux, Eugene C., Excelsior Springs
Robins, Eli, St. Louis
Robinson, Arthur W., Kansas City
Robinson, Edith C., St. Louis
Robinson, Edward E., Adrian
Robinson, Ernest K., Kansas City
Robinson, George G., Humansville
Robinson, G. Wilse, Jr., Kansas City
Robinson, John A., Edgerton
Robinson, William J., Kansas City
Robison, James T., Jr., Kansas City
Roblee, Melvin A., St. Louis
Roche, Maurice B., St. Louis
Rodeman, John M., Sedalia
Roden, J. S., Columbia
Rodes, Ned D., Mexico
Rodgers, Elrie P., Columbia
Rodgers, Samuel U., Kansas City
Roe, Allen N., Wentzville
Roebber, Harry M., Bonne Terre
Roehrs, Marvin E., Marshall
Rogers, Cyril H., St. Louis
Rogers, John A., University City
Rogers, John T., St. Joseph
Rohlfing, Edwin H., St. Louis
Rohlfing, Walter H., St. Louis
Rohr, Joseph H., Kansas City
Roller, Merrill J., Hannibal
Rollins, Harry D., Winona
Rolufs, Lloyd S., Kirkwood
Rolwing, E. Chas., Charleston
Ronald, Douglas C., Butler
Roodman, Herman J., Clayton
Roper, Stanley D., Ozark
Rose, Charles W., Kansas City
Rose, Dalton K., St. Louis
Rose, Frank H., Albany
Rosecan, Marvin, St. Louis
Rosen, Charles S., St. Louis

Rosen, Max, Springfield
Rosenbaum, Harry D., St. Louis
Rosenbaum, Herbert E., St. Louis
Rosenberg, Henry E., St. Louis
Rosenfeld, Henry, St. Louis
Rosenthal, Irwin I., St. Joseph
Ross, Herman C., Brentwood
Rost, William B., St. Joseph
Roter, Alexander M., St. Charles
Roth, John J., St. Louis
Rother, Paul H., St. Charles
Rothman, David, St. Louis
Rothweiler, Robert J., St. Louis
Rotter, Julius C., St. Louis
Roufa, Joseph F., St. Louis
Roulhac, George E., St. Louis
Roundy, Collis I., St. Joseph
Rouse, David M., Mexico
Rouse, Ernest T., St. Louis
Rowlette, Avery P., Moberly
Roy, Joseph A., Jennings
Royce, James J., Noel
Royce, Robert K., St. Louis
Royse, Roy P., Sullivan
Royston, Grandison D., Hope, Ark.
(Member St. Louis Medical Society)
Rubenstein, Melvin, St. Louis
Rubin, Sidney, Kansas City
Rubnitz, Leon H., Kansas City
Ruddell, George W., St. Louis
Rudi, Herbert J., St. Louis
Rufe, John R., Kansas City
Ruff, T. Eugene, Poplar Bluff
Ruhling, Rudy, St. Louis
Rusk, Earl M., New Bloomfield
Russell, Barbara E., Rolla
Russell, Earl D., Springfield
Russell, James M., Monett
Russell, Richard L., Kansas City
Russell, Robert K., Raytown
Rutledge, John F., Crystal City
Rutledge, Paul E., Kirkwood
Rutledge, William J., Campbell
Ryan, John B., Washington
Ryan, John H., St. Joseph
Ryan, John J., Clayton
Ryan, Robert E., St. Louis

S

Sachar, Leo A., St. Louis
Saferstein, A. Lester, Kansas City
St. John, Dewey, St. Louis
St. John, Thomas C., St. Louis
Saladino, Anthony, Kansas City
Sale, Llewellyn, St. Louis
Sale, Llewellyn, Jr., St. Louis
Salisbury, William J., St. Louis
Sammons, Harry C., St. Louis
Sample, George A., Chaffee
Samuelson, Edward A., Kansas City
Sanders, George E., Excelsior Springs
Sanders, Harmon U., Jr., Independence
Sanders, Robert D., St. Louis
Sanders, Theodore E., St. Louis
Sanders, William F., Kansas City
Sandy, Charles, Prairie Village, Kansas
(Member Cooper County)
Sante, Leroy R., St. Louis
Saper, Philip, Lee's Summit
Sargent, Alden P., Sikeston
Sargent, John P., Sikeston
Sarno, Samuel M., Morehouse
Sassin, Edmond F., St. Louis
Sato, George, St. Louis
Satterfield, Val B., Chesterfield
Sauer, F. J. Dean, St. Louis
Sauer, Gordon C., Kansas City
Sauer, W. Nicholas, St. Louis
Saunders, Everett L., Independence
Sausville, Albert J., St. Louis
Sawyer, Floyd E., North Kansas City
Sawyer, James, St. Louis
Scanlon, Robert C., Branson
Scarpellino, Louis, Kansas City
Schaerer, Jacques P., St. Louis
Schaerrer, Hans, Kansas City
Schaerrer, William C., Kansas City
Schaper, Ernest H., St. Louis
Schattyn, Martyn, St. Louis
Schechter, Samuel E., Clayton
Scheele, Paul M., Brentwood
Scheer, George E., St. Louis
Scheff, Harold, St. Louis
Scherman, Victor E., St. Louis
Schertz, Truman B., North Kansas City
Scheuber, Charles, San Antonio, Texas
(Member Boone County)
Schewe, Elmer J., Jr., Columbia
Schierman, William D., University City
Schiffmacher, Jack E., Kansas City
Schillie, Gene A., Kansas City
Schlenker, Lawrence, St. Louis
Schlicht, Mabelle B., Webb City
Schluer, Elmer P., St. Louis
Schlueter, Newell W., St. Louis
Schmidt, Charles A., Gerald
Schmidt, Edwin H., St. Louis
Schmidt, Edmund M., St. Louis
Schmidt, Herbert H., Washington
Schmiemeier, Herman A., St. Louis
Schmiemeier, Roy H., St. Louis
Schmitz, Edgar F., St. Louis
Schneider, Sam, St. Louis
Schneider, Vincent A., St. Charles
Schnoebelen, Paul C., St. Louis
Schoeberl, Cletus B., Joplin
Schopp, Alvin C., St. Louis
Schorer, Edwin H., Kansas City
Schottman, Gerhard W., Jr., Kansas City
Schrepel, Herbert O., St. Louis
Schroeder, Henry A., St. Louis
Schroeder, Sidney O., Liberty
Schuchat, W. Louis, St. Louis
Schulte, Gregory A., Joplin
Schultz, Loraine E., Columbia
Schultz, Samuel, St. Louis
Schuman, Stanley H., St. Louis
Schuster, Joseph M., Jr., Cleveland, Ohio
(Member St. Louis Medical Society)
Schutz, Carl B., Kansas City
Schutz, Richard B., Kansas City
Schwartz, Eugene J., Springfield
Schwartz, Frederick O., St. Louis
Schwartz, Henry G., St. Louis
Schwartz, Melvin M., St. Louis
Schwartzman, Bernard, St. Louis
Schwarz, Ralph C., St. Louis
Schweiss, John F., St. Louis
Schweitzer, Fred C., Jr., Springfield
Sciortino, Gaspare, St. Louis
Sciortino, John S., St. Louis
Scopelite, Joseph A., St. Louis
Scorse, Sidney W., Joplin
Scott, Clive D., Louisiana
Scott, Elijah A., St. James
Scott, Elwin P., St. Louis
Scott, Henry F., Ormond Beach, Fla.
(Member St. Louis County)
Scott, Wendell G., St. Louis
Seabaugh, D. Rusby, Cape Girardeau
Seabaugh, Dayton I. L., Jackson
Seabaugh, Loy R., Cape Girardeau
Seabaugh, Oda L., Cape Girardeau
Seabaugh, Ottis D., Webster Groves
Seabaugh, William O. L., Cape Girardeau
Seabold, John A., University City
Seddon, John W., St. Louis
See, William B., Columbia
Seeley, James J., St. Louis
Seely, Clark W., Kansas City
Seib, George A., St. Louis
Seidel, Donald R., address unknown
Senn, Emmett J., Herculaneum
Senne, Herbert C., St. Joseph
Sennott, John S., Jefferson City
Senor, Samuel E., St. Joseph
Senturia, Ben H., St. Louis
Senturia, Hyman R., St. Louis
Serkes, Kenneth D., St. Louis
Sertl, John D., St. Louis
Settle, Emmett B., Rockport
Seven, Omar R., Rockhall, Maryland
(Member St. Louis Medical Society)
Sewell, Minor F., Kansas City
Sewell, Walter S., Springfield
Sewing, Arthur H., St. Louis
Sexauer, Arthur E., Ste. Genevieve
Sexton, Daniel L., St. Louis
Sexton, Elmer E., St. Louis
Shackelford, Horace H., St. Louis
Shahan, Philip T., St. Louis
Shanahan, Eugene R., address unknown
Shaner, John F., St. Louis
Shapiro, Lazare M., Kansas City
Shapleigh, John B., St. Louis
Sharp, Austin R., St. Louis
Shatz, Burton A., St. Louis
Shaw, Carvel T., Hermann
Shaw, William J., Fayette
Shaw, William J., Jr., Fayette
Shaya, Ezra S., St. Louis
Sheahon, John A., Kansas City
Shecter, Nathan, Kansas City
Sheets, John S., St. Louis
Sheets, Martin E., St. Louis
Shelby, Mitchell H., Cape Girardeau
Shelden, Russell D., Kansas City
Sheldon, John, Kansas City
Shelton, Edward O., Eldon
Shen, Jerome T. Y., St. Louis
Shepherd, Charles T., St. Louis
Sherard, Julius C., St. Louis
Sheridan, Edmund R., St. Louis
Sherman, Alfred I., St. Louis
Sherry, Sol, St. Louis
Sherwin, Charles F., St. Louis
Shevlin, Charles P., St. Joseph
Shifrin, Alexander, Kansas City
Shinkawa, Shigeo, St. Charles
Shireman, Kenneth L., Kansas City
Shirey, Arnold G., Hayti
Shobe, Frank O., St. Louis
Shofstall, Charles K., Kansas City
Shoss, Milton, Cape Girardeau
Shrader, E. Lee, St. Louis
Shreffler, Algie R., Tavernier, Fla.
(Member St. Louis Medical Society)
Shrout, Cecil B., Bunceton
Shuey, Herbert H., Kansas City
Shull, George D., Jefferson City
Shuman, Joseph S., St. Louis
Shumate, David L., Kansas City
Shumate, L. St. Clair, Reeds Springs
Shutt, Cleveland H., St. Louis
Shypper, Moses J., Kansas City
Siceluff, Joseph G., Springfield
Siegel, Carl D., Sedalia
Siegel, Peter V., Smithton
Siemers, George E., St. Louis
Siesener, Herbert H., St. Louis
Sievers, Edward F., St. Louis
Sights, Warren P., Jr., Columbia
Signorelli, Andrew J., St. Louis
Silsby, Don H., Springfield
Silsby, Don J., Springfield
Silsby, Harry D., Springfield
Silverberg, Charles, St. Louis
Silvermintz, Saul D., Ladue
Simmons, Benjamin B., St. Joseph
Simmons, Leroy, Sarcoxie
Simms, Otho M., St. Charles
Simon, Bettie H., St. Louis
Simon, David L., St. Louis
Simon, Jerome I., St. Louis
Simon, Sanford, Kansas City
Simon, Selig, St. Louis
Simpson, Albert P., Springfield
Simpson, Eber, St. Louis
Simpson, Emerson L., Springfield
Simpson, Guy L., St. Louis
Simpson, Lloyd, Columbia
Simril, Wayne A., Clayton
Sims, John L., Joplin
Sinclair, Alexander B., Kansas City
Singleton, J. Milton, Kansas City
Sinkler, William H., St. Louis
Sisk, James C., Clayton
Sisson, Richard G., St. Louis
Skeffington, Mary Jane, St. Louis
Skilling, David M., Jr., St. Louis
Skillman, Robert K., Kansas City
Skinner, John O., Kansas City
Skinner, John S., St. Louis
Skinner, John T., Kansas City
Skoog, Andrew L., S. Pasadena, Calif.
(Member Jackson County)
Slaughter, Shelby C., Fredericktown
Slentz, Edwin L., Kansas City
Slentz, William A., Kansas City
Slickman, Robert A., Appleton City
Small, Walter L., Kansas City
Smart, Leon A., St. Louis
Smathers, John H., Florissant
Smiley, William, St. Louis
Smit, Herbert M., St. Louis
Smith, Arthur B., Kansas City
Smith, Audra B., Sikeston
Smith, Benjamin F., Jr., Clayton
Smith, C. Souter, Springfield
Smith, Carl C., Moberly
Smith, Clifton, St. Joseph
Smith, Dale C., Kansas City
Smith, Frank J., St. Louis
Smith, Garland F., St. Louis
Smith, George E., Kirkwood
Smith, Grafton A., Columbia
Smith, Harvey S., Springfield
Smith, Herbert P., St. Louis
Smith, Hubert E., Kansas City
Smith, Hugh R., St. Louis
Smith, Ira T., Kansas City
Smith, J. Earl, St. Louis
Smith, James O., Clinton
Smith, Jason N., Jr., Columbia
Smith, John R., St. Louis
Smith, Kathleen, St. Louis
Smith, Louis J., New Madrid
Smith, Milton, St. Louis
Smith, Robert M., St. Louis
Smith, Robert S., Portageville
Smith, Robert W., Marceline
Smith, Roland T., Joplin
Smith, Rollin H., West Plains
Smith, Sidney E., St. Louis
Smith, Ulysses S., Hannibal

Smith, William A., Somerton, Arizona
(Member St. Louis County)
Smith, William J., Hannibal
Smith, William J., Windsor
Smith, William R., Carthage
Smolik, Edmund A., St. Louis
Smull, Ned W., Kansas City
Snavely, Edmund C., Sedalia
Snead, William H., Jr., Springfield
Sneid, Philip, Kansas City
Snider, Samuel H., Kansas City
Snyder, Edward N., St. Louis
Solomon, H. James, Zion, Illinois
(Member St. Louis Medical Society)
Sommer, Conrad S., St. Louis
Sommer, Ross B., Brentwood
Soule, Samuel D., St. Louis
Spafford, Allen L., Kansas City
Spalding, Wilber B., Plattsburg
Spears, Joe L., Cabool
Spelman, Archibald E., Smithville
Spence, Elbert L., Kennett
Speno, Angelo A., Clayton
Spinzig, Edgar W., Kirkwood
Spitz, Milton A., Milwaukee, Wis.
(Member St. Louis County)
Spitzer, Ernest, University City
Spoeneman, Marlin C., St. Louis
Spoenemann, Walter H., St. Louis
Sportsman, Weldon L., Kansas City
Spratt, John S., Jr., St. Louis
Stacey, Wallace R., Independence
Stacy, Winton T., St. Joseph
Staehle, Melvin E., St. Louis
Staggs, William A., Kansas City
Stahl, Phineas D., St. Louis
Staley, Harry R., Kansas City
Stallard, Donald J., St. Joseph
Stamp, Warren C., St. Louis
Stanfield, Ned M., Jr., St. Louis
Stanley, Charles G., Kansas City
Stansbrough, Raymond A., St. Louis
Starke, Helen, Kansas City
Starkloff, Gene B., St. Louis
Starkloff, Max, St. Louis
Statland, Harry, Kansas City
Statland, Morris, Kansas City
Staton, R. Hamilton, Carrollton
Stauffacher, C. Gordon, Sedalia
Stauffer, Harry B., Jefferson City
Stecker, George, St. Louis
Steele, Jack T., Ferguson
Steffen, Lawrence F., Kansas City
Stegman, Elmer G., Raytown
Stein, Arthur H., Jr., St. Louis
Stein, Harry J., St. Louis
Stein, Leonard A., St. Louis
Steinbeck, Herbert D., Union
Steinbeck, Herbert F., St. Louis
Steinberg, Franz U., St. Louis
Steiner, Albert S., St. Louis
Steiner, Alexander J., St. Louis
Stelmach, Walter J., Kansas City
Stephan, August P., Jefferson City
Stephens, Leroy J., St. Louis
Stephens, Louis F., St. Louis
Stephens, William A., St. Louis
Stephenson, Hugh E., Jr., Columbia
Stergen, Nick E., St. Louis
Sterkel, Richard L., St. Louis
Sterling, Charles E., St. Louis
Sterling, John A., Maplewood
Stevens, Robert W., St. Louis
Stewart, Floyd, St. Louis
Stewart, Frances H., St. Louis
Stewart, John W., St. Louis
Stewart, Robert B., Springfield
Stewart, Robert H., Sedalia
Stewart, R. Wendell, Springfield
Stewart, William J., Columbia
Stickle, Arthur W., St. Louis
Stickler, Ralph O., Kirksville
Stindel, Charles E., Webster Groves
Stine, Dan G., Columbia
Stocking, Lyman C., Kirkwood
Stockton, Raymond W., Kansas City
Stockwell, A. Lloyd, Kansas City
Stokes, James M., St. Louis
Stokes, Julius B., Excelsior Springs
Stolar, Jacob, St. Louis
Stone, Charles A., St. Louis
Stoneman, William, St. Louis
Stotts, Charles S., Kansas City
Stratemeier, Edward H., Kansas City
Strauchen, Gilbert W., Webster Groves
Strauss, Arthur E., St. Louis
Streetor, Roderick D., St. Louis
Strehlman, Benjamin G., Union
Stricker, Emil A., St. James
Stricker, Harold C., Jefferson City
Strong, Richard M., Hannibal
Stryker, Garold V., St. Louis
Stuart, Byron M., Boonville
Stuart, Daniel D., Brunswick
Stude, William C., St. Louis
Stuebner, Roland W., St. Louis
Stutsman, Albert C., St. Louis
Sudholt, Alfred F., Jr., St. Louis
Sugarbaker, Everett D., Jefferson City
Suggett, Finis C., Columbia
Sullivan, B. Hazard, Miami
Sullivan, Clement J., St. Louis
Sullivan, James F., St. Louis
Sullivan, William J., Providence, R. I.
(Member North Central Counties)
Sultzman, Francis E., Hannibal
Summers, Caldwell B., Kansas City
Summers, Jacob H., Lebanon
Summers, John B., St. Louis
Summers, Joseph S., Jr., Jefferson City
Summers, Thomas F., St. Louis
Sunderman, Raymond C., St. Louis
Sundin, Paul W., Windsor
Sundstrom, Frank D., Springfield
Susman, Noah, Columbia
Sutherland, Gladys P., Bethany
Sutphin, John B., Ferguson
Sutter, Richard A., St. Louis
Swarm, Richard L., Bethesda, Md.
(Member St. Louis Medical Society)
Sweaney, Isaac F., Oregon
Sweany, Henry C., Mt. Vernon
Sweet, Herbert C., Webster Groves
Sweets, Henry H., Jr., Hannibal
Sweiger, James H., Maysville
Swekosky, Frank J., St. Louis
Swisher, Robert C., Kansas City
Switzer, Clyde, Kansas City
Szabados, Ernest D., Independence
Szymanski, Stanley R., Moberly

T

Tadlock, Baxter W., St. Joseph
Tahir, Mohammad, St. Joseph
Talbott, Hudson, Louisville, Ky.
(Member St. Louis Medical Society)
Tanaka, George M., St. Louis
Tanner, Robert H., Jefferson City
Tapper, Stephen M., St. Louis
Tarr, John R., Houston
Tarrasch, Ernest L., Springfield
Tarson, Solomon S., Kansas City
Tarver, Quinton, Kennett
Tarvydas, Francis, Edina
Tashma, Sigmund, St. Louis
Tasker, Charles B., Kansas City
Tate, Lloyd L., St. Louis
Taussig, Barrett L., St. Louis
Taylor, Byron H., Jr., Fredericktown
Taylor, E. T., St. Louis
Taylor, Elmer W., Lockwood
Taylor, Eugene D., St. Louis
Taylor, Helen L., St. Louis
Taylor, J. E., Pleasant Hill
Taylor, Leo T., Neosho
Taylor, Leon A., Jefferson City
Taylor, Van W., Bonne Terre
Taylor, William E., Springfield
Teall, Raymond E., Kansas City
Teare, Max E., Wichita, Kansas
(Member Buchanan County)
Teiber, Frederick W., St. Louis
Teneglia, Eutimio D., St. Louis
Ternberg, Jessie L., St. Louis
Terrill, Robert S., Kansas City
Tess, Melvin J. H., St. Louis
Tesson, James A., Kansas City
Thale, Thomas, St. Louis
Theel, Otto W., Jr., Kansas City
Thiele, Belmont R., St. Louis
Thiele, George H., Kansas City
Thiele, O. K., Webster Groves
Thiessen, Edward H., Kansas City
Thoma, George E., Jr., St. Louis
Thomas, Charles S., St. Louis
Thomas, Christopher Y., Kansas City
Thomas, Forrest, St. Joseph
Thomas, Helen E. Y., Columbia
Thomas, Horace E., Columbia
Thomas, Wilbur A., St. Louis
Thomasson, David D., Springfield
Thomasson, Mary W., University City
Thomasson, Robert E., St. Louis
Thompson, Arthur M., St. Louis
Thompson, Charles L., Kansas City
Thompson, Emma A., Columbia
Thompson, F. Gregg, Jr., St. Joseph
Thompson, J. William, St. Louis
Thompson, Lawrence D., St. Louis
Thompson, Ralph L., St. Louis
Threadgill, Jesse M., Forsyth
Throgmorton, Howard B., Sikeston
Thurber, Claude M., Windsor
Thurman, Hill C., Parkville
Thym, Henry P., St. Louis
Tibbs, William A., Jr., St. Louis
Tice, Wayne K., Independence
Tichenor, Robert W., Sappington
Tietjen, Frederick O., Jefferson City
Tiffany, D. E., Mountain View
Tillman, Walter W., Jr., Springfield
Timpton, Richard H., St. Louis
Tindall, Robert N., St. Louis
Tinsley, John C., Jr., Columbia
Tippett, Jack C., St. Louis
Titterington, Paul F., St. Louis
Tjoflat, Oliver E., St. Louis
Tobias, Norman, St. Louis
Todd, Thomas B., Nevada
Tomlinson, William L., St. Louis
Tonelli, George L., St. Louis
Tooker, Charles W., St. Louis
Torin, Bernice A., University City
Towers, Orville W., St. Charles
Townsend, James A., Clayton
Townsend, Vincent F., Maplewood
Tracy, Herbert A., Belton
Treiman, Robert C., St. Louis
Tremain, E. E., Maplewood
Tremain, Irl G., St. Louis
Tribble, Robert E., Chaffee
Trigg, Joseph F., St. Louis
Tripodi, Anthony M., Tacoma, Wash.
(Member St. Louis Medical Society)
Trippe, Harrison C., Kansas City
Triska, Roland A., St. Louis
Trolinger, James H., Jackson
Trotter, Francis O., Jr., St. Louis
Trowbridge, Barnard C., Kansas City
Trowbridge, Ellsworth H., Prairie Village, Kansas
(Member Jackson County)
Trowbridge, Elsworth H., Jr., Kansas City
Trueblood, Alva C., Jr., St. Louis
Trugly, Edith S., St. Louis
Trunko, Leo, Lemay
Tsang, John L. K., Springfield
Tucker, Eugene F., St. Louis
Tureen, Louis L., St. Louis
Turner, Glenn O., Springfield
Turner, James H., Poplar Bluff
(Member SEMO County)
Turner, James K., St. Louis
Turner, Percy C., Kansas City
Turner, Rush, St. Louis
Turner, William F., Poplar Bluff
(Member SEMO County)
Tuthill, Herbert, Kansas City
Twedell, Donald L., St. Louis
Twin, Edward J., Kansas City
Twyman, Richard A., Kansas City
Tygett, Glenn J., Cape Girardeau
Tyler, Wendell H., St. Charles

U

Uhlemeyer, Henry A., St. Louis
Ulett, George A., St. Louis
Ulett, Pearl C., St. Louis
Underwood, Dick H., Kansas City
Underwood, Harry A., Kansas City
Underwood, Johnson, Jr., Kansas City
Underwood, Millard K., Rolla
Underwood, Ross H., Kansas City
Unger, Harold, Kansas City
Unterberg, Hillel, St. Louis
Upshaw, Paul O., Springfield
Upsher, Albert E., Kansas City
Urban, Edgar D., Sikeston
Utterman, William F., Perryville
Uyeno, Frank S., Brentwood

V

Vacca, Joseph B., San Antonio, Texas
(Member St. Louis Medical Society)
Vail, A. Denton, Springfield
Valach, Frank J., Brentwood
Valentine, Herbert S., Kansas City
Van Biber, James T., Independence
Van Buskirk, Terrance E., Kansas City
Van Buskirk, William C., Kansas City
Van Cleve, John D., Malden
Vandiver, Virgil D., Chillicothe
Vandover, John T., St. Louis
Van Matre, R. M., Washington, D. C.
(Member St. Louis Medical Society)
Van Urk, Jules B., Carthage
Vatterott, Paul B., St. Louis
Vaughan, J. Russell, St. Louis
Vaughn, Arthur N., St. Louis
Venable, Howard P., St. Louis
Verda, Dominic J., St. Louis
Vermillion, Crofford O., St. Louis

Vcscovo, Paul C., Jr., Smithville
Vest, James C., St. Louis
Vezeau, Stephen, St. Louis
Vilmer, Charles, Kansas City
Vincent, Jack C., Kansas City
Vinyard, Jack L., Herlong, Calif.
(Member Clay County)
Vinyard, Paul, St. Louis
Virant, John A., St. Louis
Virden, Herbert H., Kansas City
Vitale, Anthony J., St. Louis
Vitale, Nicholas S., St. Louis
Vitt, Alvin E., St. Louis
Vitt, Edwin F., St. Louis
Viviano, Joseph G., St. Louis
Vizgird, Joseph J., St. Louis
Vogel, Eugene A., St. Louis
Vogt, William H., Jr., St. Louis
Vohs, Carl F., St. Louis
Vollmar, Clarence J., Webster Groves
Von Kaenel, Joseph E., St. Louis
Votaw, Robert E., St. Louis
Voth, Harold W., Kansas City
Vournas, Christopher G., St. Louis

W

Wacker, Leo L., St. Louis
Waddle, Theo. L., Dexter
Wade, Frederick E., Kansas City
Wade, James Paul, St. Louis
Wade, William H., Columbia
Wadlow, Ernst E., St. Joseph
Wagenbach, Wm. F., St. Louis
Waggoner, Chas. M., Columbia
Waggoner, Sharon E., St. Joseph
Wakefield, Franklin, Jr., Kansas City
Wakeman, Jasper N., Springfield
Wald, Stanley M., St. Louis
Walden, James M., Kansas City
Walk, Lloyd F., St. Louis
Walker, Ambrose T., Mammoth Springs, Ark.
(Member South Central Counties)
Walker, George S., Clinton
Walker, Harvey, Jr., St. Louis
Walker, Hugh B., Clinton
Walker, James C., Kansas City
Walker, John W., Kansas City
Walker, Paul W., Joplin
Walker, Willard B., Clayton
Walker, William E., LaMonte
Wall, Albert, St. Louis
Wall, Arthur H., Sierra Madre, Calif.
(Member Jackson County)
Wall, Emmett D., St. Louis
Wall, Harry C., Kansas City
Wall, Leonard A., Kansas City
Wallace, Edgar S., Mexico
Walsh, Theodore E., St. Louis
Walsh, Thomas J., St. Louis
Walsh, Wm. T., Morgantown, W. Virginia
(Member Greene County)
Walter, Archie L., Sedalia
Walters, Harold E., St. Louis
Walters, John H., Columbia
Walters, Laura, Columbia
Walters, Wm. H., St. Louis
Walterscheid, John H., Hannibal
Walthall, Damon O., Kansas City
Walther, Roy A., Jr., St. Louis
Walton, Franklin E., St. Louis
Walton, Marion C., Mountain View
Waltrip, Roy T., Jr., Sikeston
Ward, Joe, Lexington
Ward, Robert L., Centralia
Ward, Robert L., Kansas City
Warner, George K., St. Louis
Warner, Robert G., St. Louis
Warres, Herbert L., St. Joseph
Washburn, J. Loren, Versailles
Washington, Edw. L., Columbia
Wasserman, Helman C., St. Louis
Waterman, Franklin M., Liberty
Waters, Clarence N., St. Louis
Waters, E. Burton, Kirkwood
Waters, Hugh R., St. Louis
Watkins, George L., Jr., Farmington
Watson, Cecil L., Odessa
Watson, Ethel, Independence
Wattenberg, Carl A., St. Louis
Watts, Byron E., Jefferson City
Waxman, David, Kansas City
Waxman, Jane Z., Kansas City
Wayland, Thomas A., Camdenton
Webb, Leslie R., Jr., Springfield
Webb, Marion A., St. Louis
Webb, Paul B., St. Louis
Webb, Paul B., Jr., St. Louis
Webb, Paul K., St. Louis
Weber, Eugene P., St. Louis
Weber, Sol, St. Louis
Weber, William K., St. Louis
Webster, Joseph G., Kansas City
Webster, Roger W., Hayward, California
(Member Jasper County)
Weed, Randal W., St. Joseph
Weeks, George R., Minneapolis, Minn.
(Member Mid-Missouri Counties)
Weger, Carl C., Keytesville
Wegner, Carl R., St. Louis
Weiford, Edward C., Kansas City
Weiler, Thomas J., St. Louis
Weinel, Francis G., St. Louis
Weinhaus, Robert S., St. Louis
Weinsberg, William C., St. Louis
Weintraub, Soloman A., St. Louis
Weir, Don C., St. Louis
Weir, Royal A., St. Louis
Weis, Matthew W., St. Louis
Weisbrod, Wilfred B., Toronto, Canada
(Member St. Louis County)
Weisman, Renate D., St. Ann
Weisman, Sol, St. Louis
Weiss, James M. A., University City
Weiss, Richard S., St. Louis
Weitman, Maximiliam, St. Louis
Welch, Hooper W., St. Louis
Welker, Joseph E., Kansas City
Well, Julius W., Palmyra
Welsh, Laurence C., St. Louis
Weltscheff, Christo A., Kansas City
Wempe, G. Raymond, Maryville
Wenneker, Alvin S., St. Louis
Wennerman, Sam F., St. Louis
Wentzel, Louis R., St. Louis
Wepprich Michael S., Washington
Werner, Dean F., North Kansas City
Werner, Franklin C., North Kansas City
Werner, William A., St. Louis
Werth, Ducan S., Glendale
West, Joseph W., St. Louis
Westerman, Henry C., University City
Westphaelinger, Henry F., St. Louis
Westrup, Arthur W., Webster Groves
Westrup, Ellsworth A., Kirkwood
Wetzel, Fred S., Jr., Carthage
Weyerich, Leon F., St. Louis
Whecler, Charles B., Kansas City
Wheeler, John H., Kansas City
Whitaker, Topsy T. H., East Prairie
White, Charles H., Kansas City, Kansas
(Member Jackson County)
White, George A., Kansas City
White, Orville O., St. Louis
White, R. Ned, Springfield
White, Stoughton F., Kansas City
White, Wm. H., St. Louis
White, Wm. H., Jr., Clayton
Whitehead, Frank F., Neosho
Whiteman, John R., Kansas City
Whitener, Paul R., St. Louis
Whitman, Doyle C., Kansas City
Whitmore, J. Stewart, Kansas City
Whitsell, John C., St. Joseph
Whitsell, Ora E., St. Joseph
Whitten, Marion F., Carthage
Whittico, James M., St. Louis
Wick, Quintin J., St. Louis
Wicks, Mary R., San Francisco, California
(Member St. Louis Medical Society)
Wiedershine, Leonard J., St. Louis
Wiegand, Herbert C., St. Louis
Wieman, Harry K., Joplin
Wien, Irving A., Kansas City
Wiener, Meyer, Coronado, California
(Member St. Louis Medical Society)
Wiese, Harry W., St. Louis
Wiggins, Roland L., Columbia
Wilbur, David G., Cabool
Wilbur, Ronald E., Cheyenne, Wyoming
(Member Clinton County)
Wilcox, Claude V., St. Louis
Wilcoxen, William B., Bowling Green
Wild, Aloysius A., St. Louis
Wiles, Jack N., West Plains
Wilhelm, Warren F., Kansas City
Wilhelmi, Otto J., St. Louis
Wilkinson, Everett A., Kansas City
Will, Leo A., St. Louis
Williams, Charles S., Malden
Williams, Delon A., Kansas City
Williams, Edward B., Jr., St. Louis
Williams, Frank R., Springfield
Williams, John M., Liberty
Williams, John W., Springfield
Williams, John W., Jr., Springfield
Williams, John W., Oak Grove
Williams, Joseph C., Jr., Kansas City
Williams, Luke E., Kansas City
Williams, Ray D., St. Louis
Williams, Robert A., Phillips, Texas
(Member Jackson County)
Williams, Robert S., Mexico
Williams, Roland D., Kansas City
Williams, Starks J., Kansas City
Williams, Vincent T., Kansas City
Williamson, George L., Kansas City
Williamson, Oscar E., St. Louis
Williamson, Walter E., St. Louis
Willis, Norman E., Poplar Bluff
Willits, Lyle G., Kansas City
Willman, Vallee L., St. Louis
Willoughby, James W., Liberty
Willoughby, Jean B., Kansas City
Willumsen, Henry C., St. Joseph
Wilson, Alice H., Joplin
Wilson, Charles F., Cape Girardeau
Wilson, Clifford C., Kansas City
Wilson, Daniel R., Mt. Vernon
Wilson, Fred K., Winston
Wilson, Hester J., Kansas City
Wilson, Hugh M., St. Louis
Wilson, Keith S., St. Louis
Wilson, Kenneth O., St. Louis
Wilson, Loys C., Kennett
Wilson, Virgil R., Rosendale
Wilucki, Leo E., St. Louis
Wilucki, Melvin R., St. Louis
Wimber, Thomas C., St. Louis
Wimp, Jesse J., Kirksville
Windhorst, Dorothy B., St. Louis
Windmiller, Myrl E., Columbia
Winer, Herbert J., Kansas City
Winkelman, Esther B., Kansas City
Winn, George W., Boonville
Winokur, George, St. Louis
Winston, Bernard H., Kansas City
Winter, Tyrus D., St. Louis
Winterer, Roland A., St. Louis
Wippo, Edgar W., St. Louis
Wirthlin, Edward H., St. Louis
Wise, George W., Kansas City
Wise, Gordon F., Springfield
Wissmath, Frank S., Clayton
Wissner, Seth, Clayton
Withers, Orval R., Kansas City
Withrow, John B., North Kansas City
Witt, Clyde M., St. Louis
Witt, Frederick W., St. Louis
Wittler, Harry A., Brentwood
Wolf, Jack W., Kansas City
Wolff, Paul G., Cape Girardeau
Woltzen, Samuel W., Clinton
Womble, James G., Augusta, Georgia
(Member St. Louis Medical Society)
Wommack, Fred L., Crane
Wood, Bennett R., St. Louis
Wood, George F., Fulton
Wood, George H., Carthage
Wood, James A., Clayton
Wood, William W., Springfield
Woodruff, Frederick E., St. Louis
Woods, Harold V., Independence
Woods, Walton C., Parkville
Wooldridge, Bart F., Joplin
Wooldridge, W. E., Springfield
Woolf, Ralph B., St. Louis
Workman, George M., Hermann
Worley, Charles A., Sweet Springs
Wortmann, Robert F., Kansas City
Wotawa, William J., St. Louis
Wray, Rolla B., Nevada
Wright, George W., Webb City
Wright,. Robert P., Kansas City
Wu, William Q., Kansas City
Wulff, George J. L., Jr., St. Louis
Wyatt, Lois C., Kirkwood

Y

Yaeger, Gerald A., St. Louis
Yancey, Daniel L., Springfield
Yanow, Mitchell, Clayton
Yates, J. Lewis, Mt. Vernon
Yohe, Ruth M., Kansas City
Yore, Richard W., St. Louis
York, William B., Sarcoxie
Yoskit, Harry, Festus
Yost, Walter B., Hinsdale, Illinois
(Member St. Louis County)
Young, Calvin C., Jr., Joplin
Young, James E., Kansas City
Young, Jesse W., Kansas City, Kansas
(Member Jackson County)
Young, John S., St. Louis
Young, Leo P., St. Louis
Young, Robert H., Moberly
Younge, Walter A., St. Louis
Younger, Anita, St. Louis
Younger, Ernest, St. Louis
Yuan, Louis S. K., St. Louis

Z

Zacharias, David L., Kansas City
Zahorsky, John, Steelville
Zahorsky, Theodore S., St. Louis
Zahrt, Frank H., Princeton
Zeffren, Joel L., Bronx, New York
(Member St. Louis Medical Society)
Zeinert, Oliver B., University City
Zeitler, Walter A., Jennings
Zeitler, William T., St. Louis
Zellermayer, Jacob, Kansas City
Zentay, Paul J., St. Louis
Ziegelmeyer, John S., St. Louis
Ziegler, Allen M., Kansas City
Ziegler, Dewey K., Kansas City
Zillgitt, George H., St. Louis
Zimmerman, Herbert B., Olivette
Zimmerman, Joseph A., Kennett
Zimmermann, Carl A. W., III, Cape Girardeau
Zingale, Frank G., St. Louis
Zink, Oscar C., St. Louis
Zoglin, Nathan, Kansas City
Zuber, Harold V., Kansas City
Zuckner, Jack, St. Louis
Zwart, Claude H., St. Louis

List of Members by County Societies

ADAIR COUNTY

(North Central Counties Medical Society)

ANDREW COUNTY MEDICAL SOCIETY

Baker, Warren C., Savannah
Holliday, Morgan L., Fillmore
Kelley, Gilbert B., Savannah
Kelley, Ralph R., Savannah
Long, Forrest C., Savannah
Wilson, Virgil R., Rosendale

ATCHISON COUNTY

(Nodaway-Holt-Atchison-Gentry-Worth Counties Medical Society)

AUDRAIN COUNTY MEDICAL SOCIETY

Bland, Warren W., Vandalia
Coil, Paul E., Mexico
Davis, Leonard L., Jr., Mexico
Dwyer, Thomas L., Mexico
Ector, Henry J., Mexico
Epple, Kathryn C., Mexico
Epple, Lawrence K., Mexico
Gantt, Ernest S., Jr., Mexico
Garcia, Charles L., Mexico
Jolly, Benjamin N., Mexico
Jolly, William H., Mexico
Kallenbach, G. P., Mexico
Lankford, Harold D., Mexico
O'Brien, Harry F., Mexico
Rodes, Ned D., Mexico
Rouse, David M., Mexico
Wallace, Edgar S., Mexico
Williams, Robert S., Mexico

BARRY COUNTY

(Ozarks County Medical Society)

BARTON-DADE COUNTY MEDICAL SOCIETY

Arnold, Herbert M., Lamar
Bickel, Vern T., Lamar
Cain, Alvin R., Lamar
Carroll, Thomas W., Lamar
Guldner, Edmond, Lamar
Heilbrunn, Max, Lockwood
Locker, George E., Iantha
McNeel, Lee A., Jr., Greenfield
Taylor, Elmer W., Lockwood

BATES COUNTY

(West Central Missouri Medical Society)

BENTON COUNTY MEDICAL SOCIETY

Logan, James A., Warsaw
Reser, Thomas S., Cole Camp

BOLLINGER COUNTY

(Unorganized)

BOONE COUNTY MEDICAL SOCIETY

(Columbia)

Allen, Horace E., Professional Bldg.
Allen, Joseph E., Professional Bldg.
Anast, C. S., 308 Thilly Ave.
Baker, James M., 16 S. 10th St.
Battersby, Richard S., 113 Westwood Ave.
Black, Samuel P. W., 108 S. Glenwood St.
Bolner, Anne U., 1105 E. Cleermont Circle, Huntsville, Ala.
Brooke, Clement E., 501 Edgewood Ave.
Brukardt, Diane, Medical Center
Bruner, Claude R., Professional Bldg.
Buesseler, John A., Medical Center
Bumgarner, James E., 909 University Ave.
Bumgarner, Roger W., 1723 Amelia St.
Burek, A. W., 211 Tenth St., Wausau, Wis.
Burns, Thomas W., 106 Westwood Ave.
Chalkley, Judson I., Boone County Hospital
Chiasson, E. Chaille, Guitar Bldg.
Cooper, Maurice E., 8 Wayne Rd.
Cope, James C., Professional Bldg.
Darnell, Thomas F. B., Professional Bldg.
Denninghoff, James C., 202 S. 10th St.
Dietrich, Karl D., Professional Bldg.
Evans, Alden McC., Ellis Fischel State Cancer Hospital
Flynn, Joseph E., University of Missouri School of Medicine
Freeman, R. F., 1613 E. Broadway
Fuchs, George J., Jr., 9 Hickory Hill Dr.
Galeota, William R., University of Missouri School of Medicine
Garrett, Glen H., Professional Bldg.
Gaunt, William D., University of Missouri School of Medicine
Gordon, James S., 807 Stadium Rd.
Grayson, R. R., Stephens Bldg.
Hall, John, Ashland
Hardwicke, Henry, Division of Health, Jefferson City
Hepner, Walter Ray, Jr., 1112 West Broadway
Hitchcock, Waldo P., University Hospital
Holmes, John L., Medical Center
Jackson, Robert L., University of Missouri
Johnson, Richard E., Ellis Fischel State Cancer Hospital
Keats, Theodore E., 624 Lakeshore Dr.
Keown, Kenneth K., University of Missouri
Lachance, Leopold, Centralia
Ladenson, Roland P., 16 S. 10th St.
Lamke, Charles M., Professional Bldg.
Leech, Charles A., 417 Guitar Bldg.
Lewis, Ray B., 112 Park Hill
Lodwick, Gwilym S., 40 Redgeley Rd.
Logue, John, 516 Crestland Dr.
Lowney, John F., University of Missouri
McElroy, Glenn L., Professional Bldg.
Martt, Jack M., University of Missouri
Miller, Leroy J., Guitar Bldg.
Modlin, John J., 310 Thilly Ave.
Mohs, Frank R., 12 Paris Court
Moranville, Benedict A., University of Missouri
Neal, M. Pinson, University of Missouri
Overholser, Milton D., University of Missouri
Payne, John W., Professional Bldg.
Perna, Vincent P., 204 Medical Science Bldg.
Pickard, Clarence M., 1 West Blvd., N.
Pingelton, William B., 1006 Cherry St.
Pullen, Roscoe L., University of Missouri
Ransdell, James F., Medical Science Bldg.
Ray, Clarence T., University of Missouri
Roden, J. S., 1620 Bass Ave.
Rodgers, Elrie P., Box 157
Scheuber, Charles, 237 Long Rd., San Antonio, Texas
Schewe, Elmer J., Jr., Route 6
Schultz, Loraine E., Boone County Hospital
See, William B., Professional Bldg.
Sights, Warren P., Jr., 807 Stadium Rd.
Simpson, Lloyd, 411 Stewart Rd.
Smith, Grafton A., 22 Hickory Hill Dr.
Smith, Jason N., Jr., 513 West Blvd., S.
Stephenson, Hugh E., Jr., University of Missouri
Stewart, William J., Professional Bldg.
Stine, Dan G., 9 Francis Drive
Suggett, Finis C., 805 Broadway
Thomas, Helen E. Y., 503 Russell Lane
Thomas, Horace E., Professional Bldg.
Tinsley, John C., Jr., 16 S. 10th St.
Wade, William H., University of Missouri
Waggoner, Charles M., Professional Bldg.
Walters, John H., Guitar Bldg.
Walters, Laura, Guitar Bldg.
Ward, Robert L., Centralia
Washington, Edward L., Professional Bldg.
Wiggins, Roland L., 201 N. 3rd St.
Windmiller, Myrl E., 401 Guitar Bldg.

BUCHANAN COUNTY MEDICAL SOCIETY

(St. Joseph)

Allain, J. J., 902 Edmond St.
Allaman, John M., 439 Acacia Dr., Sarasota, Fla.
Ames, William H., 902 Edmond St.
Augustine, Robert W., 902 Edmond St.
Bascom, Charles H., Woodson Bldg.
Beck, Leroi, 1618 N. 3rd St.
Beck, Paul M., 409 Kirkpatrick Bldg.
Benson, Scott C., 324 N. 6th St.
Berney, Francis J., 1402 Faraon St.
Boteler, George McC., 303 Howitt Bldg.
Bristow, Robert B., Physicians & Surgeons Bldg.
Butler, E. F., 902 Edmond St.
Carpenter, George T., 902 Edmond St.
Chiarottino, Joseph F., Doctor's Bldg.
Christ, Martin H., 6106 King Hill Ave.
Craig, Owen W. D., 405 Tootle Bldg.
Day, Maxwell, Schneider Bldg.
DuMont, Clement C., 1905 Francis St.
Ferguson, Luther J., 723½ Felix St.
Fisher, Joseph L., 824 Edmond St.
Fogarty, Edward R., (Address Unknown)
Forgrave, John R., 420 N. 8th St.
Forgrave, Leon P., 420 N. 8th St.
Forman, George W., P. O. Box 747
Fuson, Levi H., Kirkpatrick Bldg.
Grant, Claude S., Doctor's Bldg.
Greenberg, Charles, Address Unknown
Grimes, M. E., Kirkpatrick Bldg.
Handler, Eric, Physicians & Surgeons Bldg.
Harner, Casper G., 902 Edmond St.
Herman, Allen I., 301 Physicians & Surgeons Bldg.
Howden, Thomas L., 419 Kirkpatrick Bldg.
Hughes, Judson M., Kirkpatrick Bldg.
Hull, Walter S., Faucett
Hunt, William J., 2600 Pacific St.
Ide, Lucien W., P. O. Box 747
Kieber, Robert W., 317 Kirkpatrick Bldg.
Knepper, P. A., Box 747
Kulowski, Jacob, 1402 Faraon St.
Lau, Gustav A., 217 Kirkpatrick Bldg.
McDaniel, John R., 902 Edmond St.
McDonald, Wilbur P., 301 N. 8th St.
McGlothlan, Arthur B., 821 N. 24th St.
Magnin, Richard L., 216-218 Physicians & Surgeons Bldg.
Martin, John N., Physicians & Surgeons Bldg.
Meluney, S. E., 214 Kirkpatrick Bldg.
Minton, Robert S., 705 Corby Bldg.
Moen, Berwyn H., 902 Edmond St.
Morroway, James H., State Hospital 2
Morse, Marvin, 2702 Faraon St.
Mothershead, John L., 2603 Frederick St.
Muench, Albert H., Physicians & Surgeons Bldg.
Mullinax, Orr, State Hospital 2
Mundy, Homer F., 2801 Sacramento St.
Nelson, Fred L., 902 Edmond St.
Ness, Carl K., 902 Edmond St.
O'Connor, William B., Kirkpatrick Bldg.
Petersen, H. E., 2401 Frederick St.
Pfeffer, Robert I., 1915 N. 29th St.
Pifer, Lawrence H., 1302 Faraon St.
Potter, Caryl A., Jr., Physicians & Surgeons Bldg.
Potter, Thompson E., 731 Faraon St.
Redmond, William, 411 Corby Bldg.
Riddell, Richard V., 902 Edmond St.
Rogers, John T., 2502 Ashland Ave.
Rosenthal, Irwin I., 2715 Union St.
Rost, William B., 2221 N. W. Extension Blvd.
Roundy, Collis I., Kirkpatrick Bldg.
Ryan, John H., 301 N. 8th St.
Senne, Herbert C., Physicians & Surgeons Bldg.
Senor, Samuel E., 722½ Francis St.
Shevlin, Charles F., 902 Edmond St.
Simmons, Benjamin B., 801½ Francis St.
Smith, Clifton, 2821 Ashland St.
Stacy, Winton T., 900 Ashland Court
Stallard, Donald J., 902 Edmond St.
Tadlock, Baxter W., 2727 Jule St.
Tahir, Mohammad, Box 66, Wyatt Park
Teare, Max E., 5814 Rockwood Dr., Wichita, Kans.
Thomas, Forrest, State Hospital 2
Thompson, F. Gregg, Jr., P. O. Box 830
Wadlow, Ernest E., Kirkpatrick Bldg.
Waggoner, Sharon E., 301 Illinois Ave.
Warres, Herbert L., 902 Edmond St.
Weed, Randal W., 824 Edmond St.
Whitsell, John C., 824 Edmond St.
Whitsell, Ora E., 824 Edmond St.
Willumsen, Henry C., 902 Edmond St.

BUTLER-RIPLEY-WAYNE COUNTY MEDICAL SOCIETY
(Poplar Bluff)

Barbour, Marvin R., Kneibert Clinic
Biggs, Fred J., Jr., Kneibert Clinic
Brandon, Walter L., P. O. Box 407
Brookreson, Alton F., 321 Oak St.
Canlas, Emilio M., 705 Pine Blvd.
Clay, Hampson S., 218 N. Broadway
Cline, Edward W., Butler County Health Center
Cline, Harold H., Piedmont
Dinelli, Frank E., 215 Oak St.
Engelhardt, Robert C., Kneibert Clinic
Gernstetter, Sangwill L., P. O. Box 473
Hansbrough, Eugene T., 623 Pine Blvd.
Harwell, James L., 203 S. Main St.
Harwell, J. Lester, 1311 N. Main St.
Henrickson, Hardin M., 215 Oak St.
Henrickson, Hardin O., 215 Oak St.
Henrickson, William E., Poplar Bluff Hospital
Johnson, Frank C., Doniphan
Knapp, Rudolf, Veterans Administration Hospital
Kneibert, Fred L., Kneibert Clinic
Loughead, John R., W. Maude St.
McLain, B. M., 724 Cynthia Dr.
McPheeters, James W., Sr., 330 N. 2nd St.
McPheeters, J. W., Jr., 330 N. 2nd St.
Macauley, Bernard J., 215 Oak St.
Malinoski, Mitchell V., Veterans Hospital
Markel, Arthur D., Kneibert Clinic
May, Albert L., Jr., 330 N. 2nd St.
Miller, David Y., Kneibert Clinic
Parker, Arthur C., Jr., Kneibert Clinic
Post, Cyril A., 123 S. Broadway
Ruff, T. Eugene, Kneibert Clinic
Turner, James H., 217 Oak St.
Turner, William F., 217 Oak St.
Willis, Norman E., 218 N. Broadway

CALDWELL COUNTY
(Grand River Medical Society)

CALLAWAY COUNTY MEDICAL SOCIETY

Baur, Alfred K., State Hospital 1, Fulton
Brown, John J., 101 E. 6th St., Fulton
Cremer, William J., State Hospital 1, Fulton
Crews, Robert N., 612 Court St., Fulton
Durst, Henry, 610 Court St., Fulton
Freund, H. G., State Hospital 1, Fulton
Gish, Rutledge, 5 E. 5th St., Fulton
Groce, George, 607 Court St., Fulton
Hall, Robert G., 4406 McPherson Ave., St. Louis
Hill, James E., 607 Court St., Fulton
Hunter, James R., Webster Groves
Jackson, Vernon B., 407 Court St., Fulton
Johnson, Tom L., Shawnee, Okla.
Kepler, Earl C., State Hospital 1, Fulton
McCubbin, J. Burleigh, 531 E. 20th St., New York 10, N. Y.
Nichols, Frank J., State Hospital 1, Fulton
Price, Robert P., State Hospital 2, St. Joseph
Ritterbusch, James K., State Hospital 1, Fulton
Rusk, Earl M., New Bloomfield
Wood, George F., 614 Market St., Fulton

CAMDEN COUNTY

CAPE GIRARDEAU COUNTY MEDICAL SOCIETY
(Cape Girardeau)

Ashley, Hugh V., 711 Broadway
Ashley, Hugh, Jr., 711 Broadway
Bahn, Charles F., 1902 W. Broadway
Barnes, Seth S., 1854 Broadway
Blaylock, Richard D., 408 N. Russell St., Jackson
Campbell, Edward D., 937 Broadway
Cochran, Jo R., 709 Broadway
Crites, Edward, Sedgewickville
Crowe, John T., 937 Broadway
Drace, James J., 903 Bellevue St.
Elrod, Dennis B., 1912 Broadway
Estes, Albert M., 714 Broadway
Ford, Walter W., Gordonville
Hall, Frank W., 1912 Broadway
Herbert, Charles T., 824 Good Hope St.
Hoxworth, Gerald M., 120 Sheridan St.
Jaeger, Joseph N., 208 S. High St.
Johnson, Earl W., 937 Broadway
Juden, Alexander G., 4 S. Spanish St.
Kasten, Melvin C., 1453 Themis St.
Keim, John H., 230 N. Sprigg St.
Kinder, James A., 937 Broadway
Kratz, Paul E., 1912 Broadway
Lovinggood, Thomas A., 649 Sylvan Lane
McDonald, Eugene F., 125 Court St., Jackson
McGinty, Charles P., 1912 Broadway
Nunnelly, Gordon M., 1924 Broadway
Nussbaum, Paul B., 1758 Broadway
Oehler, William F., 234 N. Middle St.
Otto, Thomas G., 1912 Broadway
Rapp, Harold B., 1011 N. Henderson St.
Rawlins, Fred E., 1607 Berthing St.
Reynolds, Garland A., 826 Themis St.
Ridings, Harold D., 937 Broadway
Ritter, Raymond A., 1912 Broadway
Seabaugh, Dayton I. L., Jackson
Seabaugh, D. Rusby, 219 N. Pacific St.
Seabaugh, L. R., 219 N. Pacific St.
Seabaugh, Oda L., 24 N. Sprigg St.
Seabaugh, William O. L., 24 N. Sprigg St.
Shelby, Mitchell H., 1250 Normal St.
Shoss, Milton, Medical Arts Bldg.
Trolinger, J. H., 122 S. High St., Jackson
Tygett, Glenn J., 215 N. Sprigg St.
Wilson, Charles F., 714 Broadway
Wolff. Paul G., 1819 Broadway
Zimmermann, Carl A. W., Oakenwold

CARROLL COUNTY
(Grand River Medical Society)

CARTER-SHANNON COUNTY MEDICAL SOCIETY

Rollins, H. D., Winona

CASS COUNTY
(West Central Missouri Medical Society)

CEDAR COUNTY
(West Central Missouri Medical Society)

CHARITON-MACON-MONROE-RANDOLPH COUNTY MEDICAL SOCIETY

Arnold, Eugene L., Moberly
Baker, Josephine D., Moberly
Barnett, Floyd A., Paris
Campbell, James E., Macon
Chute, W. Deward, Moberly
Cohrs, Clarence C., Moberly
Collins, Gretchen D., Macon
Dreyer, Philip V., Huntsville
Eggleston, Donald E., Macon
Fellows, William W., Address Unknown
Fleming, Jacob W., Jr., Moberly
Fleming, Thomas S., Moberly
Hardy, John W., 1326 Platinum St., Butte, Mont.
Harms, Florian L., Salisbury
Hasson, Robert, Moberly
Hawkins, George W., Salisbury
Huber, Lasley E., Moberly
Johnson, Edward M., Box 2, Wm. Beaumont Army Hospital, El Paso, Texas
McMurtry, Leonard K., Moberly
Miller, D. Herbert, Veterans Hospital, Montgomery, Ala.
Miller, Howard S., Macon
Ragsdale, George M., Paris
Rice, Grover C., Brunswick
Rowlette, A. P., Moberly
Smith, Carl C., Moberly
Streetor, Roderick D., 1332 Blackstone Ave., St. Louis 12
Stuart, Daniel D., Brunswick
Szymanski, Stanley R., Moberly
Weger, Carl C., Keytesville
Young, Robert H., Moberly

CHRISTIAN COUNTY
(Ozarks County Medical Society)

CLARK COUNTY
(Lewis-Clark-Scotland County Medical Society)

CLAY COUNTY MEDICAL SOCIETY

Aks, Daniel, Smithville
Allen, S. Lloyd, Route 6, Box 404B, Parkville
Baird, J. Edward, Excelsior Springs
Bates, George C., 2730 S. Mall, Kansas City
Bealer, Louis A., Centralia
Boone, Daniel S., 3329 Mohawk Lane, Kansas City
Bowles, Richard P., 112 N. Water St., Liberty
Bruce, Paul C., 152 Hi-Way, Liberty
Casady, Gilbert N., Virginia Mason Hospital, Seattle, Wash.
Chastain, Maurice W., 2016 Swift Ave., N. Kansas City
Chiles, David R., Smithville
Cox, William L., 101 W. Kansas St., Liberty
Dunham, R. H., 2025 Swift Ave., N. Kansas City
Dwyer, Reinhardt D., 1806 Swift Ave., N. Kansas City
Edwards, Theodore F., 329 Armour Blvd., N. Kansas City
Fischer, Edward H., 306 E. 21st Ave., N. Kansas City
Fowler, I. Charles, 2025 Swift Ave., N. Kansas City
Gauer, Robert J., 4916 N. Sherwood Dr., N. Kansas City
Gay, Elmer E., Richmond
Goodson, William H., Liberty
Gullett, Charles C., 10 Richards Rd., Kansas City
Hayes, Lawrence L., 1508 E. 51st St., N. Kansas City
Hendren, Glenn W., Liberty
Hobbs, Earl B., Smithville
Hodge, Robert H, 329 Armour Rd., N. Kansas City
Houck, Russell M., V. A. Hospital, Kecoughton, Va.
Knox, Earl R., 224 Rialto Bldg., N. Kansas City
Kovac, Albert P., 2510 Vivion Rd., N. Kansas City
Kuenzi, Donald E., Gashland Clinic, Gashland
Langhus, Melvin O., Route 4, N. Kansas City
Love, Drury M., 613 E. 66th St., Kansas City 10
McCormick, James E., 4030 N. Oak St., N. Kansas City
McCracken, Samuel R., 107 W. Spring St., Excelsior Springs
Mullins, Bernard L., 1806 Swift Ave., N. Kansas City
Musgrave, David E., Excelsior Springs
Nicholson, Ralph L., 116 South St., Excelsior Springs
Parker, Robert H., 2005 Fayette, N. Kansas City
Pate, O. S., 206 Pioneer Bldg., N. Kansas City
Pileggi, Felix A., R. 4, Brady Hills, N. Kansas City
Porter, Russell C., 831 N. Camino Miramonte, Tucson, Ariz.
Revare, Paul, 2025 Swift Ave., N. Kansas City
Roberts, Lacy M., General Hospital 1, Kansas City
Robichaux, Eugene B., 116 South St., Excelsior Springs
Robichaux, Eugene C., Excelsior Springs
Sanders, George E., 116 South St., Excelsior Springs
Sawyer, Floyd E., 329 Armour Rd., N. Kansas City
Schertz, Truman B., 2005 Fayette St., N. Kansas City
Schroeder, Sidney O., Liberty
Spelman, Archibald E., Smithville
Sportsman, Weldon L., 6309 N. Grand Ave., Kansas City
Vescovo, Paul C., Smithville
Vinyard, Jack L., Sierra Ordnance Depot, Herlong, Calif.
Waterman, F. M., Liberty
Werner, Dean F., 2025 Swift Ave., N. Kansas City
Werner, Franklin C., 1906 Erie St., N. Kansas City
Williams, John M., 32 S. Main St., Liberty
Willoughby, James W., 114 N. Water St., Liberty
Withrow, John B., 2025 Swift Ave., N. Kansas City
Zacharias, David L., 6708 N. Oak St., N. Kansas City

CLINTON COUNTY MEDICAL SOCIETY

Kimes, Ira D., Cameron
Luckenbill, Paul T., Plattsburg
Mabrey, John P., Plattsburg

Netherton, George F., Cameron
Spalding, Wilber B., Plattsburg
Wilbur, Ronald E., Warren Air Base, Cheyenne, Wyo.

COLE COUNTY MEDICAL SOCIETY
(Jefferson City)

Barden, Frank W., State Board of Health
Belden, Edgar A., State Office Bldg.
Belinson, Louis, State Office Bldg.
Bowe, Edwin E., 120 Boonville Rd.
Bruce, James G., Central Missouri Trust Bldg.
Callahan, Donald E., 519 Larsen Lane, Crestwood 22
Cassel, William J., State Office Bldg.
Clark, Kendall A., 515 E. High St.
Cox, William A., 125 E. High St.
Dorris, Richard P., Trust Bldg.
Duval, Addison M., Division of Mental Health
Enloe, Lawrence D., Trust Bldg.
Exon, C. Stuart, 515 E. High St.
Garner, Lynn M., State Division of Health
Guhleman, Henry V., Jr., 130 Medical Arts Bldg.
Gurnee, Landon H., 515 E. High St.
Handler, Fred P., 95 E. Circle St.
Kanagowa, Hajime H., Medical Arts Bldg.
Kelly, Marshall W., 507 E. High St.
Klebba, Larry B., P. O. Box 403
Leslie, J. Paul, 929 Fairmount Blvd.
Leslie, J. T., 933 Fairmount Blvd.
Loyd, Earl L., 515 E. High St.
Loyd, Herlan O., 515 E. High St.
McHaney, John W., 606 E. High St.
McKnelly, William V., 507 E. High St.
Mansur, Edward E., 2012 N. W. 13th St., Miami 13, Fla.
Matthews, John I., 302 Bolivar St.
Maxey, Hugh W., Box 236
Meier, Francis X., 1913 Haysilton Dr.
Meinershagen, Charles W., 138 Forest Pl.
Ossman, Julian A., 2030 W. Main St.
Richardson, R. G., 421 Lafayette St.
Sennott, John S., 515 E. High St.
Shull, George D., 521 E. High St.
Stauffer, Harry B., Central Trust Bldg.
Stephan, August P., 98 W. Circle Dr.
Stricker, Harold C., 515 E. High St.
Sugarbaker, Everett D., 503 E. High St.,
Summers, Joseph S., Jr., 515 E. High St.
Tanner, Robert H., 1408 Greenberry Rd.
Taylor, Leon A., 129 E. High St.
Tietjen, Frederick O., 213 Jackson St.
Watts, Byron E., 515 E. High St.
Wayland, Thomas A., Box 239, Camdenton

COOPER COUNTY MEDICAL SOCIETY
(Boonville)

Abele, William A., 329 Main St.
Beckett, Theodore C., 317½ Main St.
Boley, James O., 3200 E. Meyer Blvd., Kansas City
Chamberlain, Gilbert L., 315 Center Ave.
Diekroeger, Manuel L., R. D. 1
Friedrichs, Vernon D., Pilot Grove
Hata, Daikichi, 329 Main St.
Humphreys, Edward T., 329 Main St.
Sandy, Charles, 4209 W. 70th, Prairie Village, Kans.
Stuart, Byron M., 329 Main St.
Winn, George W., 329 Main St.

CRAWFORD COUNTY
(Mid-Missouri County Medical Society)

DADE COUNTY
(Barton-Dade County Medical Society)

DALLAS-HICKORY-POLK COUNTY MEDICAL SOCIETY

Barnett, C. H., Bolivar
Brooks, John M., 840 S. Pickwick, Springfield
Griffin, Mary Evelyn, Buffalo
Griffin, Olin A., Jr., Buffalo
Harrell, Henry J., Morrisville
McCraw, Doyle C., Bolivar
Robinson, George G., Humansville

DAVIESS COUNTY
(Grand River Medical Society)

DEKALB COUNTY
(Grand River Medical Society)

DENT COUNTY
(Mid-Missouri County Medical Society)

DOUGLAS COUNTY
(South Central Counties Medical Society)

DUNKLIN COUNTY MEDICAL SOCIETY

Baldwin, Paul, Kennett
Beal, Homer, Malden
Belsey, Wallace A., Campbell
Benson, Leo J., Jr., Kennett
Croom, Dorwyn W., Malden
Dempsey, D. T., Kennett
Dunmire, George Q., Kennett
Edmondson, Charles T., 138 E. Emma, Springdale, Ark.
English, Wallace D., Cardwell
Fuzzell, Jameso, Kennett
Green, Robert S., Kennett
Hopkins, F. G., Gideon
Linton, C. S., Kennett
Merryman, Charles H., Senath
Miltenberger, Paul C., Kennett
Palenske, Robert L., Hornersville
Peck, Chester R., Jr., Kennett
Rutledge, William J., Campbell
Spence, Elbert L., Kennett
Tarver, Quinton, Kennett
Van Cleve, John D., Malden
Williams, Charles S., Malden
Wilson, Loys C., Kennett
Zimmerman, Joseph A., Kennett

FRANKLIN-GASCONADE-WARREN COUNTY MEDICAL SOCIETY

Bozzo, Raymond J., Washington
Brenner, Paul A., Owensville
Crawford, Robert M., Sullivan
de la Torre, John J., Sullivan
Denny, Hubert M., Union
Eisenmann, Benjamin P., New Haven
Eyermann, H. Walter, Warrenton
Hoelscher, Harold F., Warrenton
Johnson, Grover C., Marthasville
Mays, Frank G., Washington
Muench, Ludwig O., Washington
Pearl, John F., St. Clair
Post, J. P., Washington
Richardson, George A., Union
Richardson, William R., Union
Royse, Roy P., Sullivan
Ryan, John B., Washington
Schmidt, Charles A., Gerald
Schmidt, Herbert H., Washington
Shaw, Carvel T., Hermann
Steinbeck, Herbert D., Union
Strehlman, Benjamin G., Union
Wepprich, Michael S., Washington
Workman, George M., Hermann

GASCONADE COUNTY
(Franklin-Gasconade-Warren County Medical Society)

GENTRY COUNTY
(Nodaway-Holt-Atchison-Gentry-Worth County Medical Society)

GRAND RIVER MEDICAL SOCIETY
(Caldwell-Carroll-Livingston-Grundy-Daviess-Harrison-Linn-Mercer-DeKalb Counties)

Allen, Erroll W., Carrollton
Bales, Eugene L., Carrollton
Bohnsack, Ralph W., Brookfield
Booth, Herbert R., Hamilton
Breid, Jacob, Trenton
Brennan, Raymond J., Chillicothe
Brewer, Lake, Ridgeway
Bristow, Arthur S., Princeton
Brownfield, Samuel T., Brookfield
Broyles, Watkins A., Bethany
Carpenter, George W., Chillicothe
Carter, Howard, Hamilton
Clark, Chester L., Trenton
Conrad, Joseph, Chillicothe
Cullers, Charles H., Trenton
Daley, Frank R., Hamilton
Dixon, John R., Brookfield
Dowell, Donald M., Chillicothe
Dowell, Horace S., Chillicothe
Duffy, Edgar A., Trenton
Duffy, Oliver F., Trenton
Ellsworth, Willard, Cainsville
Fair, William L., Chillicothe
Fuson, William A., Trenton
Gale, Joseph F., Chillicothe
Garry, George, Marceline
Gearhart, M., Bethany
Grace, Charles M., Chillicothe
Haskell, Ralph E., Norborne
Howell, B. D., Brookfield
Johnson, Glenn D., Maysville
Kimberlin, Herbert C., Trenton
Knopf, Keith, 17027 S. Clark Ave., Bellflower, Calif.
Lambert, Marian, 11610 S. 71 Highway, Hickman Mills
LaSalle, Michael W., 1030 E. Pacific Ave., Kansas City
Lucas, John H., Brookfield
McArtor, Thomas R., Browning
Magill, Joseph S., Milan
Mairs, Edgar J., Trenton
Mandler, George, Chillicothe
Nibbe, Albert F., Bethany
Nixon, Edward E., Gallatin
Perry, John M., Princeton
Platz, John H., Carrollton
Smith, Robert W., Marceline
Staton, R. Hamilton, Carrollton
Sutherland, Gladys P., Bethany
Sweiger, James H., Maysville
Thompson, Emma A. B., Dumas Apartments, Columbia
Vandiver, Virgil D., Chillicothe
Wilson, Fred K., Winston
Zahrt, Frank H., Princeton

GREENE COUNTY MEDICAL SOCIETY
(Springfield)

Allen, Jerry H., 1211 S. Glenstone St.
Amos, James R., 1745 S. National St.
Anthony, Dallas D, Professional Bldg.
Ashley, Thomas E., 1211 S. Glenstone St.
Atkinson, Thomas E., Jr., 609 E. Cherry St.
Auner, Cecil R., Professional Bldg.
Barber, John J., Walnut Grove
Bonebrake, M. D., Professional Bldg.
Box, Ernest M., 412 E. Commercial St.
Brown, Alex L., 1636 S. Glenstone St.
Brown, James T., 724 E. Stanford St.
Brown, Lyman D., 311½ College St.
Burkey, Jordan W., Professional Bldg.
Busiek, Paul J., Professional Bldg.
Busiek, Urban J., Professional Bldg.
Callaway, Guy D., 1155 S. Delaware St.
Callaway, Guy D., Jr., 1211 S. Glenstone St.
Clarke, Michael J., 1636 S. Glenstone St.
Clary, William F., 1636 S. Glenstone St.
Clawson, James W., 1851 S. Franklin St.
Clayton, Edgar L., Professional Bldg.
Cochran, Thomas E., Jr., 2423 Brentwood Blvd.
Coller, Frederick C., 2433 Morlan St.
Conrad, Raymond C., Professional Bldg.
Crawford, Oral B., Professional Bldg.
Cunningham, Darral D., 1715 Boonville St.
Delzell, William A., McDaniel Bldg.
Dietz, M. Wendell, Burge Hospital
Dillard, Erin M., Professional Bldg.
Dills, Joseph N., 1715 Boonville Ave.
Dimond, Edgar, Veterans Adm. Hospital, McKinney, Texas
Duncan, Robert D., Professional Bldg.
Elkins, Ronald F., Professional Bldg.
Ellis, Francis J., Professional Bldg.
Engstrom, Denton P., 1636 S. Glenstone
Epps, Curtis, Medical Arts Bldg.
Evans, Ezra L., Jr., Professional Bldg.
Farthing, Fred R., 1234 E. Walnut St.
Farthing, Gene W., Medical Arts Bldg.
Feller, C. E., 1523 N. Jefferson St.
Ferguson, John P, Jr., 1219 S. Clay St.
Ferrell, Thomas E., Jr., Professional Bldg.
Fessenden, Ersel M., 634 Kingsbury Ave.
Fitch, C. H. Max, 1711 Boonville Ave.
Focht, Ralph H., Strafford
Francis, William C., Medical Arts Bldg.
Freeman, Hal E., Professional Bldg.
Fulbright, James H., 1033 E. Walnut St.
Gentry, Merritt L., 2057 Kings Ave.
German, Walter A., Jr., 1211 S. Glenstone St.
Glenn, Elmer E., Professional Bldg.
Glynn, Robert R., 1211 S. Glenstone St.
Good, James T., 4904 Sherwood Dr., Kansas City 16
Gorelick, David F., Professional Bldg.
Gose, Don F., Professional Bldg.
Hahn, Andrew L., Professional Bldg.
Hall, David W., 2122 Wayland Dr.
Hall, Durward G., 1211 S. Glenstone St.

Hanan, Ernest B., Burge Hospital
Hanss, Armand W., Medical Arts Bldg.
H'Doubler, Francis T., Professional Bldg.
H'Doubler, Francis T., Jr., Professional Bldg.
Heimburger, Leroy F., Medical Arts Bldg.
Hogeboom, George W., Professional Bldg.
Hoover, H. Lee, Jr., 1330 E. Walnut St.
Horst, Otto C., Medical Arts Bldg.
Horton, James D, Professional Bldg.
Ivy, Henry B., Holland Bldg.
Johnson, George L., Box 71, APO 438, San Francisco, Calif.
Johnson, Warford B., Professional Bldg.
Johnson, William F., Professional Bldg.
Johnston, Joseph L., 1855 S. Jefferson St.
Key, James S., 1715 Boonville St.
Klingner, George M., 2003 E. Sunshine St.
Knabb, Arthur D., 1630 N. Jefferson St.
Knabb, Harris, 1630 N. Jefferson St.
Knabb, Henry F., 1630 N. Jefferson St.
Knabb, Henry F., Jr., 1630 N. Jefferson St.
Knabb, Kenneth E., 1630 N. Jefferson St.
Kolze, Vernon W., Medical Arts Bldg.
Langston, Walter R., Professional Bldg.
Leidinger, Karl J., Republic
Lemmon, George B., 1101 E. Walnut St.
Lemmon, G. Bruce, Jr., Professional Bldg.
Leslie, James F., 1715 Boonville Ave.
Litton, Lyle D., Burge Hospital
Lockhart, Charles E., Professional Bldg.
Lowe, Horace A., Medical Arts Bldg.
Lowe, Horace A., Jr., Medical Arts Bldg.
Lurie, Harold H., Professional Bldg.
McAdoo, Hosea W., Medical Arts Bldg.
McAlhany, Howard J., 609 Cherry St.
Maddux, William P., Professional Bldg.
Maher, Robert W., Professional Bldg.
Maple, Francis M., 1211 S. Glenstone St.
Marshall, W. J., Professional Bldg.
Meyer, Claude B., Route 1, Nixa
Morton, Paul C., 1508 E. Stanford St.
Moseley, F. Thomas, 1332 S. Kentwood Ave.
Musick, James D., Medical Arts Bldg.
Napper, Marvin L., Professional Bldg.
O'Brien, James A., 525 N. 6th St., Muskogee, Okla.
Overent, Don S., 1211 S. Glenstone St.
Palcheff, Chris L., 1630 N. Jefferson St.
Park, William I., Professional Bldg.
Penninger, William H., Medical Arts Bldg.
Peterson, Stanley S., 1211 S. Glenstone St.
Plumlee, William C., Holland Bldg.
Polk, John W., Medical Arts Bldg.
Powell, Edwin M., Professional Bldg.
Prater, Bill G., Professional Bldg.
Pruett, Paul L., Professional Bldg.
Purcell, Elmer M., Professional Bldg.
Rainwater, E. H., Professional Bldg.
Rigney, Levi M., Woodruff Bldg.
Rosen, Max, Medical Arts Bldg.
Russell, Earl D., 1503 S. Glenstone St.
Schwartz, Eugene J., Professional Bldg.
Schweitzer, Fred C., Jr., Woodruff Bldg.
Sewell, Walter S., Professional Bldg.
Siceluff, Joseph G., 609 Cherry St.
Silsby, Don H., 326 Landers Bldg.
Silsby, Don J., McDaniel Bldg.
Silsby, Harry D., Professional Bldg.
Simpson, Albert P., 1715 Boonville St.
Simpson, Emerson L., 1630 N. Jefferson St.
Smith, C. Souter, 620 St. Louis St.
Smith, Harvey S., Burge Hospital
Snead, William H., Jr., Professional Bldg.
Stewart, Robert B., Professional Bldg.
Stewart, R. Wendell, Professional Bldg.
Sundstrom, Frank D., 1211 S. Glenstone St.
Tarrasch, E. L., 1636 S. Glenstone St.
Taylor, William E., Southwest Missouri State College
Thomasson, David D., 1630 N. Jefferson St.
Tillman, Walter W., Jr., Professional Bldg.
Tsang, John L. K., 1636 S. Glenstone St.
Turner, Glenn O., Professional Bldg.
Upshaw, Paul O, Medical Arts Bldg.
Vail, A. Denton, Professional Bldg.
Wakeman, Jasper N., Woodruff Bldg.
Walsh, William T., 421 Beverly Ave., Morgantown, W. Va.
Webb, Leslie R., Jr, Professional Bldg.
White, R. Ned, Professional Bldg.
Williams, John W., Professional Bldg.
Williams, John W., Jr., Landers Bldg.
Wise, Gordon F., Professional Bldg.
Wittmer, S. C.. Medical Arts Bldg.
Wood, William W., 1211 S. Glenstone St.
Wooldridge, W E., Professional Bldg.
Yancey, Daniel L., 1211 S. Glenstone St.

GRUNDY COUNTY
(Grand River Medical Society)

HARRISON COUNTY
(Grand River Medical Society)

HENRY COUNTY MEDICAL SOCIETY

Bradshaw, W. D., Clinton
Brock, Bernard, Windsor
Hollingsworth, Ray S., Clinton
Hughes, Shelby B., Clinton
King, Richard H., Clinton
McIntyre, A. N., Clinton
Riffel, Gordon W., Hq. Co., 2nd ARB, 51st Inf., New York 35, N. Y.
Smith, James O., Clinton
Smith, William J., Windsor
Sundin, Paul W., Windsor
Thurber, Claude M., Windsor
Walker, George S., Clinton
Walker, Hugh B., Clinton
Woltzen, Samuel W., Clinton

HICKORY COUNTY
(Dallas-Hickory-Polk County Medical Society)

HOLT COUNTY
(Nodaway-Holt-Atchison-Gentry-Worth County Medical Society)

HOWARD COUNTY MEDICAL SOCIETY

Allen, William C., Glasgow
Bloom, W. A., Fayette
Dean, Francis D., Fayette
Gardner, Joseph W., Glasgow
Leech, Maurice P., Fayette
Shaw, William J., Fayette
Shaw, William J., Jr., Fayette

HOWELL COUNTY
(South Central Counties Medical Society)

IRON COUNTY
(Mineral Area County Medical Society)

JACKSON COUNTY MEDICAL SOCIETY
(Kansas City)

Aaron, George A., 10901 Winner Rd., Independence
Adelman, Arthur, 751 E. 63rd St.
Ahlefeld, Charles B., 215 Pershing Rd.
Aisenstadt, E. Albert, 1204 W. 67th St.
Allebach, H. K., Research Hospital
Allen, Charles E., Waldheim Bldg.
Allen, Charles H., 616 W. Maple St., Independence
Allen, Robert E., 411 Nichols Rd.
Allen, William B., 4620 Nichols Parkway
Alsop, Webb S., Jr., 411 Nichols Rd.
Altomare, Edward P., 2610 East 63rd St.
Altringer, Arthur N., 305 W. 43rd St.
Altringer, Mary P., 8706 Blue Ridge Rd.
Anderson, A. Isadore, 723 W. 45th St.
Anderson, Raymond B., Plaza Time Bldg.
Anderson, Richard W., 1001 Romany Rd.
Andrews, Berneil W., 4620 Nichols Parkway
Andrus, Bailey C., Plaza Medical Bldg.
Appleford, George B., 215 Pershing Rd.
Arms, Arnold V., 4635 Wyandotte St.
Arst, Herbert E., 8235 President Ct.
Ashman, Theodore H., Plaza Time Bldg.
Asel, Norman D., Plaza Time Bldg.
Asher, Arthur G., Professional Bldg.
Atcheson, Bellfield, 5215 Sunset Dr.
Atwell, Floyd C., 4620 Nichols Parkway
Aull, John, Professional Bldg.
Bachmann, Paul L., 1212 W. Truman Rd. Independence
Baer, Alvin J., 751 E. 63rd St.
Baker, Philip J., 9306 E. New 40 Hwy., Independence
Ball, James E., 1102 E. 47th St.
Ballard, Volney B., Plaza Time Bldg.
Barelli, Pat A., 425 E. 63rd St.
Barnard, John L., Jr., 4312 Nichols Parkway
Barnes, Robert H., 2200 McCoy St.
Barnett, Gordon P., 751 E. 63rd St.
Barry, Gerald W., 3601 Troost Ave.
Barry, John W., General Hospital 1
Barry, William B., 116 W. 47th St.
Baum, Frank E., 701 E. 63rd St.
Baumhardt, Edward E., 4635 Wyandotte St.
Bay, Merrill R., 1808 W. Main St., Blue Springs
Becker, Richard R., 4000 Baltimore St.
Bee, James E., 3520 Broadway
Bell, William F., 18 E. 3rd St., Lee's Summit
Belot, Monti L., 7411 Highway 71 N. W., Parkville
Bennett, James D., 409 East 63rd St.
Benoit, Hector W., Jr., Plaza Parkway Bldg.
Berenson, Sheldon E., 427 E. 79th St.
Bergmann, Victor H., Professional Bldg.
Bernreiter, Michael, Professional Bldg.
Berry, Guy N., 4706 Broadway
Berry, Maxwell G., 315 Alameda Rd.
Biggs, Harry L., 63rd & Evanston Aves., Raytown
Bikales, Victor W., 425 E. 63rd St.
Bills, Marvin L., Plaza Time Bldg.
Black, Don A., Professional Bldg.
Black, Eugene C., Professional Bldg.
Blim, Richard D., Plaza Time Bldg.
Bolin, N. Venay, Plaza Parkway Bldg.
Boody, Robert J., Plaza Time Bldg.
Border, Charles T., 1701 Ruby Dr., Garland, Texas
Bordy, Marvin D., 701 E. 63rd St.
Borenstine, Joseph, 751 E. 63rd St.
Boughnou, Harvey P., 315 Alameda Rd.
Bourke, Timothy S., Rialto Bldg.
Boutros, Amin, 3112 Linwood Blvd.
Bowser, John F., Plaza Time Bldg.
Brams, Jack B., 751 E. 63rd St.
Braverman, Abe E., 701 E. 63rd St.
Bridgens, James G., Independence Sanitarium, Independence
Brown, Adrian J., 4526 Paseo Blvd.
Brown, Irwin S., Plaza Time Bldg.
Brown, Robert S., 4706 Broadway
Brown, William R., Rialto Bldg.
Broyles, Glen H., Professional Bldg.
Brumm, Lawrence W., 6308 Troost Ave.
Bruner, Robert E., 912 Valentine Rd.
Brust, Carl H., 6114 Howe Dr., Mission, Kans.
Bryan, William H., Jr., 2122 E. 12th Blvd.
Buckingham, William, Professional Bldg.
Buckner, Robert C., Plaza Parkway Bldg.
Budke, Harold A., 306 E. 12th St.
Buhler, Victor B., St. Joseph's Hospital
Buie, Bruce R., 5801 Kingslee Dr., Hickman Mills
Bunting, Williston P., 305 W. 43rd St.
Burns, Beryl I., 29 S. State St., Salt Lake City, Utah
Burns, Jonathan E., 530 S. George St., Charles Town, W. Va.
Butcher, Robert W., 1101 W. 86th St. Tr.
Butterworth, Nelson S., 910 Kensington Rd., Joplin
Byers, Philip L., 4635 Wyandotte St.
Caffrey, Raymond J., 713 Main St., Grandview
Caldwell, John K., Argyle Bldg.
Callaway, Luther M., 306 E. 12th St.
Calovich, Emery R., 4620 Nichols Parkway
Campbell, Frederick B., Professional Bldg.
Campbell, John G., Professional Bldg.
Carbaugh, Glenn C., Bryant Bldg.
Carlson, Hjalmar E., Professional Bldg.
Carmichael, Francis A., Jr., Plaza Time Bldg.
Carrier, Edson C., 315 Alameda Rd.
Casebolt, Buford T., General Hospital 1
Casebolt, Milton B., 4000 Baltimore St.
Casford, Ralph S., 315 Alameda Rd.
Castelaw, Rush E., 3731 Locust St.
Castles, John E., Argyle Bldg.
Cavaness, Ernest W., 1010 Neptune Dr., Leucadia, Calif.
Centner, Paul J., Professional Bldg.
Chambers, James Q., Jr., 4620 Nichols Parkway
Chandler, Robert A., 701 E. 63rd St.
Chapman, Arthur H., Professional Bldg.
Chapman, Samuel B., Argyle Bldg.

Clark, Harold B., Rialto Bldg.
Clark, Irving H., 5801 Kingslee Dr., Hickman Mills
Clasen, Arthur C., 4620 Nichols Parkway
Cline, Merle A., 4126 St. John Ave.
Coburn, Donald F., Plaza Time Bldg.
Cochrane, Joseph J., 4706 Broadway
Cockerell, Sanford F., 11037 Winner Rd., Independence
Coffey, Ralph R., Professional Bldg.
Coffin, Theodore A., Professional Bldg.
Cohen, Harry K., 751 E. 63rd St.
Cohen, Hilliard, Menorah Hospital
Colglazier, Mary C., 3317 E. 43rd St.
Colom, George A., 425 E. 63rd St.
Comboy, Lawrence J., 10901 Winner Rd., Independence
Connell, Evan S., Commerce Bldg.
Conover, Charles C., Trinity Lutheran Hospital
Cooper, Charles S., Rialto Bldg.
Cooper, John H., Argyle Bldg.
Cooper, Leo F., 1220 E. 31st St.
Cortner, Mary C., 4526 Paseo Blvd.
Counsell, Chester M., 708 W. 17th St.
Cowherd, Joseph B., 63rd & Brookside Aves.
Cox, Kenneth E., 4635 Wyandotte St.
Cramer, Quentin, Professional Bldg.
Creditor, Morton C., Menorah Hospital
Culbertson, William F., 1253 Huntington Rd.
Curran, Edward J., Federal Reserve Bank Bldg.
Curran, Kevin E., Federal Reserve Bank Bldg.
Curran, Maurice D., Federal Reserve Bank Bldg.
Curts, Calvin J., Professional Bldg.
Cutcliff, Daniel J., 1222 McGee St.
Dann, David S., 701 E. 63rd St.
Daum, Harold F., Argyle Bldg.
Davis, Herbert V., 4620 Nichols Parkway
Davis, Jack M., Raytown
Davis, John J., 9011 Delmar Ave., Overland Park, Kans.
Davis, Kenneth A., 231 W. 47th St.
Davis, Robert C., Professional Bldg.
Day, Cameron B., St. Luke's Hospital
Decker, Albert I., 3000 W. 73rd St.
DeMaria, Peter F., 8125 E. Gregory Blvd.
DeMott, John D., Professional Bldg.
DeMotte, John A., Plaza Medical Bldg.
Dennie, Charles C., Professional Bldg.
Deweese, Everett R., Rialto Bldg.
Dickson, Frank D., 4312 Mill Creek Parkway
Diveley, Rex L., 4312 Mill Creek Parkway
Dixon, Otto J., Professional Bldg.
Dixon, Vewiser L., 2204½ E. 18th St.
Dlabal, Luke J., 1210 Ash Ave., Independence
Doane, William L., Grandview
Dodge, Mark, 4635 Wyandotte St.
Dodge, Milton, 701 E. 63rd St.
Doherty, William R., General Hospital 1
Dolezal, Joseph B., 2003 Bryant Bldg.
Dorsch, Ervin H., 10912½ Winner Rd., Independence
Downey, James W., 425 E. 63rd St.
Drake, Roy F., Professional Bldg.
Draney, Thomas E., 4526 Paseo Blvd.
Drisko, Robert M., 4620 Nichols Parkway
Drowns, Bruce V., Professional Bldg.
Duer, Mildred C., 310 W. 47th St.
Duncan, Ralph E., P. O. Box 2597
Duncan, William H., Professional Bldg.
Dunleavy, James D., Wirthman Bldg.
Durnell, Monaford D., 18 E. 3rd St., Lee's Summit
Dwyer, Frank X., 4620 Nichols Parkway
Dwyer, Hugh L., 5408 Central St.
Edde, Clifford G., Argyle Bldg.
Edmonds, Devilla D., 4800 E. 24th St.
Eisemann, Gustave, 751 E. 63rd St.
Eldridge, Charles J., 409 E. 63rd St.
Elias, David J., 9306 E. New 40 Highway, Independence
Elliott, James R., 1080 Busch Garden Ct., Pasadena, Calif.
Elliott, Raymond G., Bryant Bldg.
Elliott, Wade E., 710 W. 12th St.
Elser, Otto H., 10901 Winner Rd, Independence
Engel, Lawrence P., 315 Alameda Rd.
Enna, Carl D., Argyle Bldg.
Eshelman, Albert D., 9306 E. New 40 Highway, Independence
Eubank, David F., Raytown
Eubank, Dillard M., Raytown
Eubank, William R., Bryant Bldg.
Eubank, William Y., Raytown
Farley, Claude C., 4526 Paseo Blvd.
Farney, Jacob P., 751 E. 63rd St.
Farnsworth, Jesse J., Professional Bldg.
Feierabend, Frank L., Argyle Bldg.
Feist, George V., 2400 Tomahawk St.
Ferguson, Donald S., 2012 E. 24th St.
Ferguson, Eugene H., Professional Bldg.
Ferguson, James T., Bryant Bldg.
Ferris, Carl R., Argyle Bldg.
Field, Lawrence M., 600 E. 72nd St.
Finkle, Robert H., 9507 E. 80th Tr.
Fitzgerald, Robert H., 10901 Winner Rd., Independence
Flanders, Horace F., Professional Bldg.
Flatley, John A., 63rd & Raytown Rd., Raytown
Fleming, Royall B., 1433 E. 19th St.
Florian, Albert J., 1224 W. 69th Tr.
Folck, William P., Professional Bldg.
Forman, Louis H., 4635 Wyandotte St.
Forsythe, Robert W., Plaza Time Bldg.
Fowler, Fred D., 4706 Broadway
Fowler, James W., 1103 Grand Ave.
Frankl, George, 751 E. 63rd St.
Fredeen, Robert C., Plaza Time Bldg.
Frick, John P., Professional Bldg.
Friedman, Morris L., 701 E. 63rd St.
Fritzlen, Thomas J., 39th & Rainbow Blvd., Kansas City, Kans.
Fuhrman, Donald L., Professional Bldg.
Fulton, Albert E., 2625 W. Paseo
Gainey, Harold L., 4635 Wyandotte St.
Ganley, William C., Argyle Bldg.
Gard, Raymond F., 10901 Winner Rd., Independence
Garrison, Roy F., 6509 Prospect Ave.
Gaskins, John H., Plaza Parkway Bldg.
Geha, Braham J., 751 E. 63rd St.
Gelperin, Abraham, City Hall Bldg.
Gempel, Paul A., 315 Nichols Rd.
Gentry, Enoch N., Jr., Telephone Bldg.
Geraughty, Edward, Odd Fellows Home, Liberty
Gestring, Hugh A., 1220 E. 31st St.
Getelson, Joseph, Rialto Bldg.
Gibson, David M., St. Luke's Hospital
Gilkey, Harry M., Professional Bldg.
Gilliland, Oliver S., Professional Bldg.
Gillmor, Charles S., Rialto Bldg.
Ginsberg, Norman A., 751 E. 63rd St.
Gist, William W., 330 W. 47th St.
Glasscock, Ernest L., Plaza Time Bldg.
Gloyne, Howard F., 231 W. 47th St.
Goldman, Stanley L., 751 E. 63rd St.
Goldsich, Edward, Plaza Theatre Bldg.
Goldstein, Irwin R., Doctors Bldg.
Goodman, Leroy, Plaza Time Bldg.
Goodson, William H., Jr., Professional Bldg.
Gorrell, Ned B., Route 1, Grandview
Grabske, Charles F., 10901 Winner Rd., Independence
Grabske, Charles F., Jr., 10901 Winner Rd., Independence
Graham, James W., 2904 Troost Ave.
Graham, Wallace H., Argyle Bldg.
Grauerholz, James W., 3527 Broadway
Greaves, Eli A., 7303 Madison Ave.
Green, John R., 10901 Winner Rd., Independence
Green, Stanley L., 10901 Winner Rd., Independence
Greene, W. Wallace, 4620 Nichols Parkway
Griffith, John A., Jr., Plaza Medical Bldg.
Growdon, John A., Professional Bldg.
Guffey, Don C., Professional Bldg.
Gundle, Sigmund, 425 E. 63rd St.
Gunn, Richard W., 317 N. Van Brunt St.
Haggen, Margaret E., 6228 Agnes St.
Haight, John M., 3401 E. 12th St.
Haley, Jack A., Professional Bldg.
Hall, Thomas B., Professional Bldg.
Hallberg, John W., Everton
Halperin, Phillip H., 751 E. 63rd St.
Hamel, Herbert A., 6306 Morningside Dr.
Hamill, Robert W., 4620 Nichols Parkway
Hamilton, Hugh G., Bryant Bldg.
Handley, James M., 5635 Russell St., Mission, Kans.
Hanes, Lee D., 4635 Wyandotte St.
Hanes, Robert L., 751 E. 63rd St.
Hardacre, Ruth A., 3300 Charlotte St.
Harless, Morris S., 409 E. 63rd St.
Harned, Bert W., 4005 W. 66th St., Prairie Village, Kans.
Hart, Lawrence W., 1710 Independence Ave.
Hartwig, Frederick H., 701 E. 63rd St.
Harshinger, Edward H., 7884 Lookout Dr., La Jolla, Calif.
Hash, Emalyn H., Plaza Parkway Bldg.
Haynes, Lee, 820 Archibald St.
Haynes, Solon E., Professional Bldg.
Hazen, Robert M., Argyle Bldg.
Hearst, Allen L., 5115 Brookwood Ave.
Heller, B. Marcus, 409 E. 63rd St.
Hellerstein, Stanley, 751 E. 63rd St.
Helman, Richard G., Professional Bldg.
Henry, Clarke L., Plaza Parkway Bldg.
Henry, Schubert D., 1115 Grand Ave.
Herbst, Frank, 330 W. 45th Tr.
Herrman, George V., Plaza Time Bldg.
Hess, Paul D., 8423 High Dr.
Hibbard, Blaine Z., Plaza Time Bldg.
Hickerson, John C., 604 W. Maple St., Independence
Hickerson, William H., 604 W. Maple St., Independence
Higgins, Robert S., 411 Nichols Rd.
Hill, Jack H., Trinity Lutheran Hospital
Hill, Jesse N., 1438 Hedges Ave., Independence
Hines, Paul, 2625 W. Paseo Blvd.
Hink, Frederick W., 10235 Independence Rd.
Hirsch, Joe E., Professional Bldg.
Hodgson, Frank H., 4301 Main St.
Hoeper, Samuel D., 6232 Troost Ave.
Hoffman, Jacob S., 751 E. 63rd St.
Hoffmann, R. Lee, Professional Bldg.
Hogan, Daniel F., 801½ W. 39th St.
Hogue, Frank S., Plaza Medical Bldg.
Hollweg, Kenneth C., Bryant Bldg.
Holman, Melvin V., Plaza Parkway Bldg.
Holt, Waldo S., 4620 Nichols Parkway
Holton, Edward B., 10901 Winner Rd., Independence
Hook, Waller C., Professional Bldg.
Hughes, Gerald E., 6509 Prospect Ave.
Hungate, Carroll P., Argyle Bldg.
Hunt, Claude J., Professional Bldg.
Hunter, Martin P., Waldheim Bldg.
Hurwitt, Frank, Pickwick Hotel
Ingham, Walton C., 411 Nichols Rd.
Irland, Robert D., Union Station Hospital
Irwig, Fred, Professional Bldg.
Jackson, William R., Bryant Bldg.
Jacob, Walter P., 701 E. 63rd St.
Jacobs, Morton, 6416 Verona Rd.
Jaime, Nicholas, 715 Westport Rd.
James, Otis E., Jr., 6306 Morningside Dr.
Jansen, Robert, 101 E. 63rd St.
Jarvis, James A., 4620 Nichols Parkway
Jeffries, Robert C., 6315 Brookside Plaza
Jennett, Harry N., 2701 Forest Ave.
Jennett, J. Harvey, Professional Bldg.
Johnson, C. Laurence, Professional Bldg.
Johnson, Edgar W., 4627 W. 70th St., Prairie Village, Kans.
Johnson, James S., 2202 E. 18th St.
Johnson, Paul A., 121 N. Chelsea Ave.
Johnson, Thomas M., Balcony Bldg.
Johnson, William A., 2206½ E. 18th St.
Johnstone, Paul N., Bryant Bldg.
Jonas, Harry S., Jr., 11711 Markham Rd., Independence
Jones, George H., 1435 E. 78th St.
Jones, T. Reid, Plaza Time Bldg.
Justus, John B., Plaza Parkway Bldg.
Kantor, Julius M., 701 E. 63rd St.
Kantor, Samuel, 751 E. 63rd St.
Katz, Milton, 751 E. 63rd St.
Kaul, Philip G., Plaza Time Bldg.
Kealhofer, George C., 6627 Prospect Ave.
Keeler, James E., 4620 Nichols Parkway
Keith, Willis E., Argyle Bldg.
Kelly, Eugene H., 402 Wabash Ave.
Keltner, Raymond O., Address Unknown
Kennard, George K., 4635 Wyandotte St.
Kent, Bela K., Doctors Bldg.
Kent, Clifford F., Professional Bldg.
Kerr, Russell W., St. Joseph's Hospital
Ketcham, William M., Waldheim Bldg.
Ketron, Marvin B., 5933 Cherry St.
Ketterman, Grace H., 112th & 71 Highway, Hickman Hills
Ketterman, Herbert L., 9231 Belinder St.
Kettner, Edward G., Professional Bldg.
Kienberger, Paul A., 5246 St. John Ave.
Kiene, Richard H., 4312 Nichols Parkway
Kimball, Merritt H., 610 E. 36th St.
King, Walter R., Professional Bldg.
Kingsbury, Helen C., 6415 Sagamore Rd.
Kiser, David M., 920 W. 47th St.
Kitchen, William M., 425 E. 63rd St.
Klein, Edward H., Plaza Medical Bldg.
Klepinger, Dayton P., address unknown
Knight, John S., 305 W. 43rd St.
Knight, Lyle B., 8 W. 3rd St., Lee's Summit

Knoch, H. Kermit, Plaza Parkway Bldg.
Koehler, Charles A., Wirthman Bldg.
Kohn, Cecil M., Doctor's Bldg.
Korth, William M., Professional Bldg.
Kraft, Jacob, 701 E. 63rd St.
Kranson, Seymour J., 1210 Ash Ave., Independence
Kuhn, William F., II, 6247 Brookside Ave.
Kyger, Fred B., Professional Bldg.
Kyger, John E. J., 701 E. 63rd St.
Kyner, Thomas A., Wirthman Bldg.
Lacy, N. Eugene, Plaza Time Bldg.
Laffoon, France L., 1326 Alta Vita Dr., N., Vista, Cal.
Lally, James J., Rialto Bldg.
Lamar, Robert F., Professional Bldg.
Landis, George K., Professional Bldg.
Laning, J. Halcombe, 6205 Brookside Ave.
Lapi, Angelo, St. Mary's Hospital
Lapi, Ruth M., 2012 Stratford Rd.
Lapp, Harry C., 751 E. 63rd St.
Latham, Raymond W., 4620 Nichols Parkway
Laurenzana, Frank P., 428 S. White St.
Layton, Ira C., Argyle Bldg.
Lee, George C., Professional Bldg.
Lehner, Richard L., Professional Bldg.
Leifer, William W.. Doctor's Bldg.
Leitch, Cecil G., 808 S. 15th St., Blue Springs
Leitz, Frank B., 6832 Locust St.
Lentz, Clark H., 215 W. Pershing Rd.
Leo, William A., Professional Bldg.
Levey, Harry B., 701 E. 63rd St.
Lewis, Revis C., Plaza Time Bldg.
Lichtor, Alexander, 751 E. 63rd St.
Lichtor, Joseph M., 751 E. 63rd St.
Lieberman, B. Albert, Jr., Professional Bldg.
Liersch, Joseph C., 815 E. Gregory Blvd.
Lilly, Terry E., Jr., 306 E. 12th St.
Lilly, Terry E., 306 E. 12th St.
Lindquist, Carl N., P. O. Box 679
Link, Vance E., 1201 W. 36th St., Independence
Linville, Howard E., Professional Bldg.
Loewy, Louis B., 2625 Paseo Blvd.
Lohrentz, Lois H., 1710 Independence Ave.
Long, Robert S., 4800 E. 24th St.
Love, Robert W., Jr., 6026 Rockhill Rd.
Lowell, Paul, 711 W. 46th St.
Lowrey, Ford J., Rialto Bldg.
Lundgren, Fred H., Jr., Plaza Medical Bldg.
Luppens, Albert F., Route 2, Box 265, Lee's Summit
Lyddon, Harold F., Jr., 75th & Troost Ave.
Lyle, Ray M., 12921 Grandview Rd., Grandview
Lytton, George J., 2200 McCoy St.
McAlester, Andrew W., III, Bryant Bldg.
McCalla, John P., 8824 E. Gregory St.
McCanse, Raymond A., Plaza Broadway Bldg.
McCarthy, William F., Blue Springs
McClanahan, Robert C., Professional Bldg.
McConchie, James E., 10901 Winner Rd., Independence
McCoy, Frederick J., 701 E. 63rd St.
McCubbin, Clarence R., 701 E. 63rd St.
McCullough, Campbell C., Argyle Bldg.
McCunniff, William B., Argyle Bldg.
McDonald, Bruce P., 2604 Prospect Ave.
McDonald, Victor G., Jr., Plaza Time Bldg.
McDonnell, John F., Plaza Medical Bldg.
McFarland, M. Donald, Plaza Medical Bldg.
McGannon, Paul T., 920 W. 47th St.
McHale, Thomas C., 4620 Independence Ave.
McKee, Joseph W., Professional Bldg.
McKee, Wallace P., Plaza Medical Bldg.
McLeod, John, 116 W. 47th St.
McMillan, Thomas E., Professional Bldg.
McPhee, William R., 1205 W. 76th St.
McPherson, Owen P., 4518 Nichols Parkway
McVay, James R., 856 W. 62nd St.
McVay, James R., Jr., Porter Bldg.
MacInnis, Florence E., 4620 Nichols Parkway
Maclean, John A., 1301 Chavez Ravine Rd., Los Angeles, Calif.
MacNaughton, Robert A., St. Joseph's Hospital
Major, Hermon S., 3100 Euclid Ave.
Makous, Norman, 10901 Winner Rd., Independence
Mangels, Kenneth A., 11717 E. 23rd St., Independence
Marks, Mark M., Doctor's Bldg.
Marsh, Alice, Kansas University Medical Center
Marshall, Cameron F., Plaza Theatre Bldg.
Masucci, Joseph M., Argyle Bldg.
Mathewson, Hugh S., 4620 Nichols Parkway
May, James W., 425 E. 63rd St.
Mayer, John H., Jr., Plaza Parkway Bldg.
Melgaard, S. Ross, 3001 W. 48th Tr., Kansas City, Kans.
Meriwether, Don R., 5109 W. 60th Tr., Mission, Kans.
Meyer, Paul W., 4312 Nichols Parkway
Meyers, Harold L., 751 E. 63rd St.
Miles, George O., Plaza Broadway Bldg.
Miller, Clint L., 8 W. 3rd St., Lee's Summit
Miller, Gerald L., 4706 Broadway
Miller, Wade H., Professional Bldg.
Miller, Walter P., 6328 Baltimore St.
Miller, Wilson H., 4620 Independence Ave.
Mitchell, Andrew D., Plaza Time Bldg.
Mitchell, Robert H., Bryant Bldg.
Mixson, William C., 4635 Wyandotte St.
Monahan, Elmer P., 17500 W. 95th St., Lenexa, Kans.
Montello, Samuel A., 4620 Nichols Parkway
Montgomery, James G., Professional Bldg.
Mooney, Justin L., Bryant Bldg.
Mooney, Marcel L., 751 E. 63rd St.
Moore, Robert A., 106 W. 14th St.
Morest, F. Stanley, Plaza Parkway Bldg.
Morgan, David B., 4620 Nichols Parkway
Moriarty, Lauren R., St. Mary's Hospital
Morrison, Donald H., Med. Dept., Bendix Aviation
Morrow, Raymond L., 17 W. 69th St.
Moss, Paul, 4706 Broadway
Mosser, Robert S., 4015 Eaton St., Kansas City, Kans.
Mueller, Martin J., Argyle Bldg.
Mullen, Leo M., 4443 Paseo Blvd.
Multhauf, Cyril J., 1222 McGee St.
Mundy, William L., Professional Bldg.
Murphy, Robert J., 4301 Main St.
Myers, John S., Shukert Bldg.
Myers, Robert M., Rialto Bldg.
Myers, Wilson A., Shukert Bldg.
Needels, Orval T., 7400 Wornall Rd.
Nelson, Bentley A., 305 W. 43rd St.
Nelson, Charles S., Westphalia, Kans.
Nesselrode, John H., 10901 Winner Rd., Independence
Nickson, Charles E., Jr., 10901 Winner Rd., Independence
Nicolay, Kenneth S., 4635 Wyandotte St.
Niedermeyer, Frederick P., 1002 Argyle Bldg.
Nigro, Dominic M., 1222 McGee St.
Nigro, E. Robert, 1222 McGee St.
Nigro, Joseph A., 1222 McGee St.
Noltensmeyer, Milton N., 3305 W. 50th St., Kansas City, Kans.
Nunn, Pat M., 1401 Southwest Blvd.
O'Brien, Leo A., Argyle Bldg.
O'Brien, Raymond W., 4620 Nichols Parkway
O'Connell, Frank A., 7951 State Line
O'Connell, Gerald L., Grandview
Ogilvie, John H., Gravois Mills
Oglevie, Rial R., Professional Bldg.
O'Hearne, John J., 4635 Wyandotte St.
O'Malley, James F., Plaza Broadway Bldg.
O'Neil, James H., 425 E. 63rd St.
Osgood, George M., Medical Bldg., Prairie Village, Kans.
Overesch, Harry B., Professional Bldg.
Owens, Graham J., 906 Grand Ave.
Owens, Hugh H., Rialto Bldg.
Owens, Michael J., 701 E. 45th St.
Owens, Richard L., Rialto Bldg.
Owens, Robert H., Broadway Plaza Bldg.
Ozar, Milton B., 701 E. 63rd St.
Padfield, Earl G., Jr., Plaza Broadway Bldg.
Pakula, Sidney F., 751 E. 63rd St.
Pallett, Harold A., Professional Bldg.
Parker, Elmer L., 3027 Campbell St.
Parker, Hubert M., Argyle Bldg.
Parsons, Eugene O., 315 Nichols Rd.
Passman, Harold, 701 E. 63rd St.
Patterson, John R., Plaza Time Bldg.
Patterson, William W., General Hospital 1
Pearson, Paul E., Rialto Bldg.
Pette, Don C., Professional Bldg.
Perll, Maurice F., 6843 Cherry St.
Perll, Rita D., 6843 Cherry St.
Perry, Ralph, 4800 E. 24th St.
Peters, Evelyn L., Menorah Medical Center
Peterson, Carl M., 2462 Brooklyn Ave.
Peterson, George L., 2625 W. Paseo Blvd.
Peterson, Milton C., 701 E. 63rd St.
Peterson, Walter R., 2462 Brooklyn Ave.
Petry, Ezra L., 701 E. 63rd St.
Pfuetze, Edwin L., 407 Plaza Parkway Blvd.
Pickard, Nicholas S., Plaza Time Bldg.
Pickens, Edgar E., 4826 Roanoke Parkway
Pierron, John B., 6516 Linden St.
Pinsker, Oscar T., 8420 Woodson St., Overland Park, Kans.
Piper, Donald K., Professional Bldg.
Pipkin, Garrett F., Argyle Bldg.
Pittam, Radford F., 418 Hyde Park St., Hutchinson, Kans.
Polk, George M., Route 1, Box 3, Lee's Summit
Pollock, Leo H., 751 E. 63rd St.
Poorman, Bert A., 2836 Prospect Ave.
Porter, Louis, 701 E. 63rd St.
Potter, Lee G., Professional Bldg.
Powell, Nelson E., St. Luke's Hospital
Powers, John M., 3304 Linwood Blvd.
Prentiss, Harry S., Rialto Bldg.
Preston, Albert, Jr., 4635 Wyandotte St.
Printz, Joseph H., 701 E. 63rd St.
Printz, Otto J., 701 E. 63rd St.
Pucci, Gregory L., 9923 Mercier St.
Pugh, Richard G., 317 W. Kansas St., Independence
Quer, Erich A., 701 E. 63rd St.
Quistgard, Paul C., 6741 Prospect Ave.
Rader, Ada B., Martin City
Ramey, Ehret O., 310 W. 47th St.
Ramos, John F. Jr., 2462 Brooklyn St.
Rannie, Paul R., 709 S. Fuller St., Independence
Rector, Joe L., Jr., St. Luke's Hospital
Reinhardt, George R., Professional Bldg.
Reister, Philip D., 814 W. 74th St.
Reitz, Carl H., 404½ W. 75th St.
Remley, George C., Argyle Bldg.
Rhoades, Arthur B., Professional Bldg.
Richardson, Marion W., 2526 Prospect Ave.
Riller, Lowell E., Professional Bldg.
Rinkel, Herbert J., Bryant Bldg.
Roberts, Grosvenor G., 701 E. 63rd St.
Roberts, Harold M., Professional Bldg.
Roberts, Sam E., Professional Bldg.
Robinson, Arthur W., 6600 Wenonga Rd.
Robinson, Ernest K., Professional Bldg.
Robinson, G. Wilse, Jr., 2625 Paseo Blvd.
Robinson, William J., 751 E. 63rd St.
Robison, James T., Jr., 4620 Nichols Parkway
Rodgers, Samuel U., 2462 Brooklyn Ave.
Rohr, Joseph H., Plaza Parkway Bldg.
Rose, Charles W., 334 S. Van Brunt St.
Rubin, Sidney, 701 E. 63rd St.
Rubnitz, Leon H., 701 E. 63rd St.
Rufe, John R., Bryant Bldg.
Russell, Richard L., Professional Bldg.
Russell, Robert K., Raytown
Saferstein, A. Lester, 6859 Cherry St.
Saladino, Anthony, Argyle Bldg.
Samuelson, Edward A., 4620 Nichols Parkway
Sanders, Harmon U., Jr., 10901 Winner Rd., Independence
Sanders, William F., 411 Nichols Rd.
Saper, Philip, 3 E. 3rd St., Lee's Summit
Sauer, Gordon C., 425 E. 63rd St.
Saunders, Everett L., 1st National Bldg., Independence
Scarpellino, Louis A., St. Luke's Hospital
Schaerrer, Hans, 5110 White St.
Schaerrer, William C., 4635 Wyandotte St.
Schiffmacher, Jack E., 330 W. 47th St.
Schillie, Gene A., General Hospital 1
Schorer, Edwin H., 5049 Wornall Rd.
Schottman, Gerhard W., Jr., St. Luke's Hospital
Schutz, Carl B., 320 W. 47th St.
Schutz, Richard B., Plaza Time Bldg.
Seely, Clark W.. Plaza Time Bldg.
Sewell, Minor F., 1722 W. 39th St.
Shapiro, Lazare M., 701 E. 63rd St.

Sheahon, John A., 7211 Richmond St.
Shecter, Nathan, 701 E. 63rd St.
Shelden, Russell D., 701 E. 63rd St.
Sheldon, John, 6305 Brookside Plaza
Shifrin, Alexander, 6709 Locust St.
Shireman, Kenneth L., 4606 St. John St.
Shofstall, Charles K., 300 W. 47th St.
Shuey, Herbert H., 3903 Brooklyn St.
Shumate, David L., 3703 Pennsylvania Ave.
Shypper, Moses J., 751 E. 63rd St.
Simon, Sanford, 701 E. 63rd St.
Sinclair, Alexander B., 920 W. 47th St.
Singleton, J. Milton, 315 Nichols Rd.
Skillman, Robert K., 4635 Wyandotte
Skinner, John O., Bryant Bldg.
Skinner, John T., Bryant Bldg.
Skoog, Andrew L., 1911 Leman St., S. Pasadena, Calif.
Slentz, Edwin L., 4620 Nichols Parkway
Slentz, William A., 4620 Nichols Parkway
Slickman, Robert A., St. Luke's Hospital
Small, Walter L., Hyde Park Hotel
Smith, Arthur B., Argyle Bldg.
Smith, Dale C., 231 W. 47th St.
Smith, Hubert E., Plaza Time Bldg.
Smith, Ira T., Professional Bldg.
Smull, Ned W., Plaza Time Bldg.
Sneid, Philip, Doctor's Bldg.
Snider, Samuel H., 722 Ward Parkway
Spafford, Allen L., 315 Nichols Rd.
Stacey, Wallace R., 10901 Winner Rd., Independence
Staggs, William A., Argyle Bldg.
Staley, Harry R., Bryant Bldg.
Stanley, Charles G., Professional Bldg.
Starke, Helen, Queen of the World Hospital (Sister Paula Theresa)
Statland, Harry, 751 E. 63rd St.
Statland, Morris, 751 E. 63rd St.
Steffen, Lawrence F., Professional Bldg.
Stegman, Elmer G., Raytown
Stelmach, Walter J., 7949 State Line St.
Stockton, Raymond W., 411 Nichols Rd.
Stockwell, A. Lloyd, Professional Bldg.
Stotts, Charles S., 330 W. 47th St.
Stratemeier, Edward H., 9728 High Dr.
Summers, Caldwell B., Plaza Theatre Bldg.
Swisher, Robert C., 425 E. 63rd St.
Switzer, Clyde, R. R. 2, Grandview
Szabados, Ernest D., 10901 Winner Rd., Independence
Tarson, Solomon S., 3221 Troost Ave.
Tasker, Charles B., Professional Bldg.
Teall, Raymond E., Professional Bldg.
Terrill, Robert S., Plaza Parkway Bldg.
Tesson, James A., Rialto Bldg.
Theel, Otto W., Jr., 4301 Main St.
Thiele, George H., 6526 High Dr.
Thiessen, Edward H., Plaza Parkway Bldg.
Thomas, Christopher Y., Plaza Broadway Bldg.
Thompson, Charles L., Plaza Time Bldg.
Tice, Wayne K., Independence Sanitarium, Independence
Trippe, Harrison C., 6247 Brookside Blvd.
Trowbridge, Barnard C., 415 E. 63rd St.
Trowbridge, Ellsworth H., 5317 W. 72nd St., Prairie Village, Kans.
Trowbridge, Ellsworth H., Jr., Professional Bldg.
Turner, Percy C., 1433 E. 19th St.
Tuthill, Herbert, Rialto Bldg.
Twin, Edward J., 701 E. 63rd St.
Twyman, Richard A., 4635 Wyandotte St.
Underwood, Dick H., Bryant Bldg.
Underwood, Harry A., 5100 E. 24th St.
Underwood, Johnson, Jr., Professional Bldg.
Underwood, Ross H., Bryant Bldg.
Unger, Harold, Doctors Bldg.
Upsher, Albert E., Argyle Bldg.
Valentine, Herbert S., 1020 W. 69th St.
Van Biber, James T., 317 W. Kansas Ave., Independence
Van Buskirk, Terrance E., St. Joseph's Hospital
Van Buskirk, William C., Professional Bldg.
Vilmer, Charles, Professional Bldg.
Vincent, Jack C., 701 E. 63rd St.
Virden, Herbert H., Professional Bldg.
Voth, Harold W., Plaza Bldg.
Wade, Frederick E., Professional Bldg.
Wakefield, Franklin, Jr., Bryant Bldg.
Walden, James M., 2204 E. 31st St.
Walker, James C., Professional Bldg.
Walker, John W., Argyle Bldg.
Wall, Arthur H., 153 Santa Anita Ave., Sierra Madre, Calif.
Wall, Harry C., 751 E. 63rd St.
Wall, Leonard A., 4635 Wyandotte St.
Walthall, Damon O., 315 Nichols Rd.
Ward, Robert L., 4126 St. John St.
Watson, Ethel, First National Bank Bldg.
Waxman, David, 4802 Prospect Ave.
Waxman, Jane Z., 4802 Prospect Ave.
Webster, Joseph G., Plaza Parkway Bldg.
Weiford, Edward C., Plaza Broadway Bldg.
Welker, Joseph E., Professional Bldg.
Weltscheff, Christo A., 315 Nichols Rd.
Wheeler, Charles B., General Hospital 1
Wheeler, John H., 411 Nichols Rd.
White, Charles H., 3001 W. 48th Tr.
White, George A., Shukert Bldg.
White, Stoughton F., 4620 Nichols Parkway
Whiteman, John R., 6314 Brookside Plaza
Whitman, Doyle C., Sharp Bldg.
Whitmore, J. Stewart, 8816 Fairway
Wien, Irving A., Professional Bldg.
Wilhelm, Warren F., Professional Bldg.
Wilkinson, Everett A., Professional Bldg.
Williams, Delon A., 1252 Stratford Rd.
Williams, Frank R., 4312 Nichols Parkway
Williams, Joseph C., Jr., 423 E. 63rd St.
Williams, Luke E., 2201 E. 27th St.
Williams, Robert A., 5 Wood St., Phillips, Tex.
Williams, Roland D., 305 W. 43rd St.
Williams, Starks J., 2462 Brooklyn St.
Williams, Vincent T., Argyle Bldg.
Williamson, George L., Professional Bldg.
Willits, Lyle G., Professional Bldg.
Willoughby, Jean B., 5905 Main St.
Wilson, Clifford C., Plaza Time Bldg.
Wilson, Hester J., Plaza Time Bldg.
Winer, Herbert J., 751 E. 63rd St.
Winkelman, Esther B., 7449 Broadway
Winston, Bernard H., Doctor's Bldg.
Wise, George W., 4620 Nichols Parkway
Withers, Orval R., Plaza Parkway Bldg.
Wolf, Jack W., 409 E. 63rd St.
Woods, Harold V., 10901 Winner Rd., Independence
Woods, Walton C., TWA Overhaul Base, Parkville
Wortmann, Robert F., 423 E. 63rd St.
Wright, R. Paul, Professional Bldg.
Wu, William Q., Doctor's Bldg.
Yohe, Ruth M., 1710 Independence Ave.
Young, James E., 4635 Wyandotte St.
Young, Jesse W., 1401 Southwest Blvd.
Zellermayer, Jacob, Doctor's Bldg.
Ziegler, Allen M., 4706 Broadway
Ziegler, Dewey K., 425 E. 63rd St.
Zoglin, Nathan M., Argyle Bldg.
Zuber, Harold V., Professional Bldg.

JASPER COUNTY MEDICAL SOCIETY
(Joplin)

Allen, David O., Medical Arts Bldg.
Alberty, Omer L., Carl Junction
Barlow, Donal E., Medical Arts Bldg.
Barnett, Norman H., Medical Arts Bldg.
Birsner, Frank H., 1717 River St., Carthage
Black, Mervin H., Financial Reserve Bldg.
Blanke, Otto T., 418 Wall St.
Burch, John E., Medical Arts Bldg.
Byrd, Homer E., Carthage
Chesney, George W., Medical Arts Bldg.
Cohle, Richard R., 116 W. 3rd St., Carthage
Collins, Joe E., 2117 Connor St.
Craig, Irwin T., Medical Arts Bldg.
Crawford, Archie L., Financial Reserve Bldg.
Crispell, Lawrence S., 6th & Pearl Ave.
Curl, Howard, 410 Jackson St.
DeTar, Burleigh E., 410 Jackson St.
DeTar, B. E., Jr., 410 Jackson St.
DeTar, George F., 410 Jackson St.
Douglas, John W., 32nd & Oak Ridge
Douglass, Jesse E., 3427 W. Coleman Rd., Kansas City, Mo.
Eliscue, Juliette M., 2002 Jackson St.
Ferguson, L. H., Jr., Medical Arts Bldg.
Ferguson, Ralph L., Medical Arts Bldg.
Ferguson, Robert M., 110 N. Webb St., Webb City
Grantham, Samuel A., Jr., 420 Byers St.
Graves, F. Burton, 616 Connor St.
Hall, Marvin F., Financial Reserve Bldg.
Hamilton, Eugene H., Medical Arts Bldg.
Holtzman, Samuel, Medical Arts Bldg.
Hornback, Edward R., Financial Reserve Bldg.
Hurst, W. W., Medical Arts Bldg.
Isbell, Charles H., Carthage
James, Edward D., 710 N. Byers St.
Jeans, Virgil, First National Bldg.
Kiehl, Katharine, Miners Bank Bldg.
Kirschman, Robert E., Medical Arts Bldg.
Koehler, John W., Medical Arts Bldg.
Kuhn, John R., Jr., Financial Reserve Bldg.
Laney, Ronald L., 3158 Skyline Dr., Oceanside, Calif.
Longenecker, Joe L., Financial Reserve Bldg.
McIntire, Emery J., 417 S. Main St., Carthage
McNew, William T., Carthage
McPike, Lloyd H., Financial Reserve Bldg.
Mack, Mary L., Address Unknown
Maddox, John D., 6th & Pearl St.
Meares, Cecil H., Jr., 420 Byars St.
Mitchell, Ernest, Route 1, Goodman
Paddock, Charles S., Medical Arts Bldg.
Papp, Sandor D., Medical Arts Bldg.
Patterson, Donald R., 418 Wall St.
Patterson, Grover S., 506 S. Main St., Carthage
Poor, Carl W., Neosho
Post, Winfred L., 617 Joplin St.
Schlicht, Mabelle C., 2117 Connor St.
Schoeberl, C. B., Medical Arts Bldg.
Schulte, G. A., 2125 Jackson St.
Scorse, Sidney W., Financial Reserve Bldg.
Simmons, Leroy, Sarcoxie
Sims, John L., 2611 Pearl St.
Smith, Roland T., Medical Arts Bldg.
Smith, William R., 304 Grant St., Carthage
VanUrk, Jules B., 414 Grant St., Carthage
Walker, Paul W., Medical Arts Bldg.
Webster, Roger W., 863 Cherry Way, Hayward, Calif.
Wetzel, Fred S., Jr., 202 W. 4th St., Carthage
Whitten, M. Foster, 616 W. Centennial St., Carthage
Wieman, Harry K., Medical Arts Bldg.
Wilson, Alice H., 1923 Sergeant St.
Wood, George H., 304 Grant St., Carthage
Wooldridge, Bart F., Medical Arts Bldg.
Wright, George W., 222 S. Webb St., Webb City
York, William B., Sarcoxie
Young, Calvin C., Jr., Financial Reserve Bldg.

JEFFERSON COUNTY MEDICAL SOCIETY

Allbee, Roger H., Crystal City
Bolgar, Bertalan, Festus
Commerford, James J., Crystal City
Donnell, Harold E., DeSoto
Donnell, Robert H., Crystal City
Donnell, Thomas A., DeSoto
Edwards, Waldo B., 11 N. Taylor Ave., Kirkwood
Fallet, Charles E., DeSoto
Kozal, Francis L., Crystal City
McKinstry, Karl V., DeSoto
Mayfield, James L., Crystal City
Reich, Oliver F., Kimmswick
Rice, Carl E., Hillsboro
Rutledge, John F., Crystal City
Senn, Emmett J., Herculaneum
Sexauer, Arthur E., Ste. Genevieve
Yoskit, Harry, Festus

JOHNSON COUNTY MEDICAL SOCIETY

Cooper, R. Lee, Warrensburg
Damron, Oscar H., 122 E. Market St., Warrensburg
Gonzalez, Mario Garza, 122 E. Market St., Warrensburg
Grove, Gulph W., Knobnoster
Harkness, Harry, Warrensburg
Holmes, David R., 1017 Grovena Dr., Crestwood
Johnson, Charles S., Warrensburg
Jones, Keith D., Warrensburg Medical Center, Warrensburg
Lederer, Charles M., Warrensburg Medical Center, Warrensburg
Maxson, T. Reed, Warrensburg
Patterson, William R., Warrensburg
Rawlins, Kelly, Holden

KNOX COUNTY
(North Central Counties Medical Society)

LACLEDE COUNTY
(Mid-Missouri County Medical Society)

LAFAYETTE-RAY COUNTY MEDICAL SOCIETY

Best, Robert, Higginsville
Brady, Hugh S., 801 Gordon St., Concordia
Brasher, Ben H., Lexington
Buehrer, Cletus E., Lawson
Cook, Thomas B., 112½ West Main St., Richmond
Cope, Joseph S., 1110½ Main St., Lexington
Crozier, Franklin A., Richmond Clinic, Richmond
Davault, George K., Gay Bldg., Richmond
Fulkerson, Wilbur E., Higginsville Clinic, Higginsville
Goldberg, Isadore E., Braymer
Kelling, Douglas G., Waverly
Kelling, George A., Waverly
Kelling, Jordan, Waverly
Koppenbrink, Walter E., Jr., Higginsville
Lissack, Edmund, Concordia
Liston, Odus, Oak Grove
Martin, Wilfred E., Odessa
Payne, Bryan T., Lexington
Riley, Ralph W., P. O. Box 393, Lexington
Ward, Joe, Lexington
Watson, Cecil L., 109 S. 2nd St., Odessa
Williams, John W., Oak Grove

LAWRENCE COUNTY
(Ozarks County Medical Society)

LEWIS-CLARK-SCOTLAND COUNTIES MEDICAL SOCIETY

Bridges, James R., Kahoka
Davis, Landis Y., 5th and Clark St., Canton
Ellery, William L., LaGrange
Jennings, Perry W., Canton

LINCOLN-ST. CHARLES COUNTY MEDICAL SOCIETY
(St. Charles)

Berry, Paul T., 160 Harris St., Troy
Bruns, Kenneth, St. Charles Clinic
Canty, Eugene J., R. R. 1
Creech, Joseph C., Troy
Crider, Russell J., St. Charles Hotel Bldg.
Damron, Edward O., Elsberry
Fleming, Robert J., 114 N. Main St.
Fong, Richard R., 126 South Main St.
Hetlage, Louis P., Troy
Jenkins, Joseph M., 117 S. Main St.
Keller, Robert M., N. Main St., Wentzville
Kister, George E., 818 N. Second St.
Neubeiser, Ben L., 206 Washington St.
Penn, Robert M., Silex
Poggemeier, Wm. H., Jr., 200 Clay St.
Randall, Don Q., 207 N. 5th St.
Roter, Alexander M., St. Charles
Rother, Paul H., 114 N. Main St.
Schneider, Vincent A., 207 N. 5th St.
Shinkawa, Shigeo, St. Charles Clinic
Towers, Orville W., 114 N. Main St.
Tyler, Wendell H., 200 N. Main St.

LINN COUNTY
(Grand River Medical Society)

LIVINGSTON COUNTY
(Grand River Medical Society)

McDONALD COUNTY
(Ozarks County Medical Society)

MACON COUNTY
(Chariton-Macon-Monroe-Randolph County Medical Society)

MADISON COUNTY
(Mineral Area County Medical Society)

MARIES COUNTY
(Mid-Missouri County Medical Society)

MARION-RALLS-SHELBY COUNTY MEDICAL SOCIETY
(Hannibal)

Archer, Perry C., Shelbyville
Bach, Lysle M., 1737 Harrison Hill
Birney, William P., 1003 Broadway
Burns, Francis R., 1001 Broadway
Canella, John M., 707 Broadway
Ellis, Sam T., Veteran's Hospital, Richmond 19, Va.
Francka, W. F., B & L Bldg.
Glascock, Donald W., 122 West North, Palmyra
Greene, Harry L., Holmes Bldg.
Hamlin, Wyeth, 1001 Broadway
Hardesty, Joel W., Holmes Bldg.
Hornback, George A., 500 Broadway
Johnson, Charles R., U. S. Naval Hospital M.O.R., San Diego, Calif.
Kibbe, John H., Monroe City
Landau, Daniel B., B & L Bldg.
Lanning, Robert J., B & L Bldg.
Levine, Ervan L., 107 N. Main St., Vandalia
Lichty, Charles A., Shelbina
Lucke, Eugene M., Court House
Murphy, Bernard L., 2000 Crescent Dr.
Rapp, Earl L., 1001 Broadway
Reichman, John J., 1001 Broadway
Roller, Merrill J., B & L Bldg.
Smith, Ulysses S., Trust Bldg.
Smith, William J., Hannibal Trust Bldg.
Strong, Richard M., 1001 Broadway
Sultzman, Francis E., 115 N. 5th St.
Sweets, Henry H., Jr., 1406 Market St.
Walterscheid, John H., 508 Broadway
Well, J. W., Palmyra

MERCER COUNTY
(Grand River Medical Society)

MID-MISSOURI COUNTY MEDICAL SOCIETY
(Phelps-Crawford-Dent-Pulaski-Maries-Laclede Counties)

Andreassen, Dimil F., Highway 72 & Rolla St., Rolla
Bass, B. J., 4th St. & Pershing, Salem
Baumann, A. R., Steelville
Bonney, Samuel C., Stricker Clinic, St. James
Breuer, Robert E., Newburg
Butts, James D., Rolla
Carrington, Howard W., 119 N. Jefferson, Lebanon
Casey, Shederic A., Lebanon
Crosby, Alice S., Hart Clinic, Salem
Davis, Harry H., Box 521, Rolla
Drake, Avery A., 302 E. 7th St., Rolla
Elders, Frank A., Jr., Cuba
Feind, Earl E., Rolla
Fisher, George E., 545 N. Jefferson Ave., Lebanon
Froelich, Rae W., Joe Knight Bldg., Lebanon
Grosskreutz, Joe A., St. James
Hammler, Christiana V., St. James
Hart, Martin M., Route 2, Salem
Hope, James L., Lebanon
Hunt, Lloyd H., Salem
Hurst, Ben B., 1122 Beverly, Lebanon
Irwin, William F., Leasburg
Jenkins, Paul A., Lebanon
Johnson, Ferrell H., Knight Bldg., Lebanon
Lindsay, John W., Conway
Lytle, William R., 10th & State St., Rolla
Miller, Clyde S., Waynesville
Mitchell, Roy E., Salem
Myers, James M., 606 W. 6th St., Rolla
Russell, Barbara E., Ramsey Bldg., Rolla
Scott, Elijah A., R. R. 2, St. James
Stricker, Emil A., St. James
Summers, Jacob H., Lebanon
Underwood, Millard K., Box 562, Rolla
Weeks, George R., 8810 11th Ave. S., Minneapolis 20, Minn.

MILLER COUNTY MEDICAL SOCIETY

Allee, Warren L., Eldon
Buehler, Carl T., Jr., Eldon
Shelton, Edward O., Eldon

MINERAL AREA COUNTY MEDICAL SOCIETY
(St. Francois-Iron-Madison-Washington-Reynolds-Ste. Genevieve Counties)

Appleberry, Charles H., Rivermines
Brennan, John A., State Hospital 4, Farmington
Bugg, Andrew F., Lordsberg, N. M.
Bull, Ben M., Ironton
Carleton, Charles E., Jr., Medical Arts Bldg., Farmington
Cresswell, George F., Potosi
Crouch, F. Richard, 714 Ste. Genevieve St., Farmington
Farrar, C. B., 721 N. Middle, Cape Girardeau
Foster, Jack L., Desloge
Gaebe, Harold C., Desloge
Gay, George, Ironton
Grossman, Marvin, Schwaner Bldg., Fredericktown
Harland, R. E., Ironton
Haw, Marvin T., Jr., 207 Fite St., Bonne Terre
Hoctor, Emmett F., State Hospital 4, Farmington
Huckstep, Robert A., 43 Pine St., Farmington
Hunt, John W., Jr., Leadwood
Karraker, Alvan G., 507 North St., Farmington
Lanning, Richard C., Ste. Genevieve
Menne, Marvin C., 109 N. Main St., Ironton
Michaelis, Charles E., 135 S. Mine La Motte, Fredericktown
Mullen, Jack, 33 N. Allen St., Bonne Terre
Roebber, Harry M., Bonne Terre Hospital, Bonne Terre
Slaughter, Shelby C., Fredericktown
Taylor, Byron H., Jr., 143 E. Main St., Fredericktown
Taylor, Van W., Box 466, Bonne Terre
Watkins, George L., Jr., 812 Dewey St., Farmington

MISSISSIPPI COUNTY
(SEMO County Medical Society)

MONITEAU COUNTY MEDICAL SOCIETY

Fulks, Richard B., California
Gallagher, Lionel M., California
Kibbe, Edgar A., California
Latham, Kenyon S., California
McDonald, Terrence J., Tipton

MONROE COUNTY
(Chariton-Macon-Monroe-Randolph County Medical Society)

MONTGOMERY COUNTY MEDICAL SOCIETY

Andersen, Elmer J. T., Montgomery City
Byland, Samuel J., Wellsville
Helm, James O., New Florence
Hirsch, Albert, Vandalia

MORGAN COUNTY MEDICAL SOCIETY

Gun, Jack, Versailles
Kauffman, Ruth, Versailles
Lyle, Robert R., Versailles
Washburn, J. Loren, Versailles

NEW MADRID COUNTY
(SEMO County Medical Society)

NEWTON COUNTY
(Ozarks County Medical Society)

NODAWAY-HOLT-ATCHISON-GENTRY-WORTH COUNTIES MEDICAL SOCIETY

Allen, James R., Rock Port
Bare, Edward F., 115 North 3rd St., Tarkio
Bauman, Henry C., 121 S. Main St., Maryville
Bell, Charles T., 635 W. 3rd St., Maryville
Blacklock, David E., King City
Byland, Benjamin F., 131 S. Main St., Maryville
Carlin, Albert L., Park Ave., Stanberry
Carpenter, Wallace, 100 Cass St., Rock Port
Cossins, Carlos E., State Hospital 2, St. Joseph
Dunshee, Robert E., 406½ N. Main St., Maryville
Hogan, Frank E., Mound City
Humberd, Charles D., Barnard
Imes, Elvin D., 119 N. Main St., Maryville
Jackson, William R., Vine and First St., Maryville
Kinney, Max W., Mound City
Kirk, Charlie W., Hopkins
Matteson, Frank B., Grant City
Niedermeyer, Edward L., Tarkio

Perry, David C., Mound City
Poff, Joseph H., Albany
Rose, Frank H., Albany
Settle, Emmett B., Rock Port
Sweaney, Isaac F., Oregon
Wempe, G. Raymond, Maryville

NORTH CENTRAL COUNTIES MEDICAL SOCIETY
(Adair-Schuyler-Knox-Sullivan-Putnam Counties)

Cramb, Arthur B., 711 C. E. Orange St., Lakewood, Fla.
English, Milton T., Jr., Kirksville
Freeman, Spencer L., Kirksville
Hart, Pearl V., Coatsville
Hasselblad, Oliver W., Kirksville
Henry, Clifford E., Kirksville
Hilton, Paul E., Kirksville
Holman, Jurney H., Unionville
Jones, John B., Kirksville
Luman, Frank E., Edina
Montgomery, John S., Milan
Stickler, Ralph O., Kirksville
Sullivan, William J., V. A. Hospital, Davis Park, Providence 8, R. I.
Tarvydas, Francis, Edina
Wimp, J. J., Kirksville

OREGON COUNTY
(South Central Counties Medical Society)

OSAGE COUNTY
(Unorganized)

OZARK COUNTY
(South Central Counties Medical Society)

OZARKS COUNTY MEDICAL SOCIETY
(Barry-Lawrence-Stone-Christian-Taney-Newton-McDonald Counties)

Andriany, Joseph, Mount Vernon
Alsup, Frederick F., Branson
Anderson, Paul B., Neosho
Aubin, Francis W., Branson
Bennett, Joseph D., Branson
Blankenship, George W., Neosho
Bowman, Melvin C., Neosho
Brasher, Charles A., Mount Vernon
Brown, Frederick B., Aurora
Burney, Wallace S., Miller
Capetti, Alex P., Crane
Carter, James R., Neosho
Coffman, Esther E. L., 1514 13th St., N., Lakeworth, Fla.
Cohnberg, Rosellen E., Monett
Cowan, R. D., Aurora
Davis, Paul C., Neosho
Donley, Robert R., Monett
Edwards, Francis L., Monett
Eller, Byron H., Address Unknown
Evans, Harry T., Branson
Gillespie, Roy, Branson
Glass, William J., Jr., Monett
Glover, Kenneth, Mount Vernon
Graves, Arthur J., Mount Vernon
Guasch, Joseph S., Mount Vernon
Hellweg, Charles E., Mount Vernon
Hobbs, George H., Mount Vernon
Holmes, Lemuel I., Miller
Imes, Clifford H., 11065 Linden St., Lynwood, Calif.
Kerr, Frank T., Monett
Lamson, Roy C., Neosho
Langeluttig, Harry V., Mount Vernon
Lentz, Harold C., Neosho
McCallum, A. J. C., Aurora
Magness, William C., Branson
Maples, Floyd H., Mount Vernon
Mars, Hartley F., Forsyth
Morrison, T. A., Aurora
Newman, Mary Jane, Cassville
Olive, George C., Neosho
Price, Charles H., Cassville
Reynolds, James R., Neosho
Roper, Stanley D., Ozark
Royce, J. J., Noel
Russell, James M., Monett
Scanlon, Robert C., Branson
Shumate, L. St. Clair, Reeds Springs
Stokes, Julius B., Excelsior Springs
Sweany, Henry C., Mount Vernon
Taylor, Leo T., Neosho
Threadgill, Jesse M., Forsyth
Whitehead, Frank F., Neosho
Wilson, Daniel R., Mount Vernon
Wommack, Fred L., Crane
Yates, J. Lewis, Mount Vernon

PEMISCOT COUNTY MEDICAL SOCIETY

Acuff, William J., 400 Carleton Ave., Caruthersville
Aquino, Philip J., Caruthersville
Beecher, Sheldon B., 1517 Rosedale Ave., Poplar Bluff
Bryant, William O., Duckworth-Caldwell Clinic, Hayti
Cain, Charles F., 400 Carleton Ave., Caruthersville
Caldwell, Jacob D., 223 South 3rd St., Hayti
Chapman, J. R., Steele
Cook, O. W., Caruthersville
Cooke, James K., Jr., Box 142 Qtrs. 136 A, NAS, Cecil Field, Fla.
Cooper, Lawrence E., 1274 Hanton St., Fort Myers, Fla.
Denton, Levi D., Hayti
Duckworth, John K., 223 South 3rd St., Hayti
Grable, James, 120 East Main St., Portageville
Gubin, Alan S., 106 W. 12th St., Caruthersville
Hensley, Daniel R., Wardell
Holcomb, Cecil E., 117 N. Walnut St., Steele
Lamb, Woodrow M., 409 S. 5th St., Paragould, Ark.
Limbaugh, Walter R., 202 E. Monroe St., Hayti
McCoy, Warren R., 106 W. 12th St., Caruthersville
McKaskle, Clarence W., 106 W. 12th St., Caruthersville
Morris, Clyde L., Caruthersville
Painter, Andrew E., 223 King St., Portageville
Painter, L. B., Jr., Portageville
Shanahan, Eugene R., Address Unknown
Shirey, Arnold G., Hayti
Smith, Robert S., 408 Ninth St., Portageville

PERRY COUNTY MEDICAL SOCIETY

Bredall, Jerome J., Newark, Del.
Carron, Oscar A., Perryville
DeGenova, G. H., Ste. Genevieve
Fairchild, James F., Perryville
Feltz, L. W., Perryville
Fischer, Theodore, Altenburg
Legner, Stanley G., Perryville
Lutkewitte, Joseph F., St. Marys
McDermott, Alfred E., Perryville
Miller, Oliver J., Rt. 1, Cape Girardeau
Quintana, Manuel M., 3526 N. Broadway, Chicago, Ill.
Riley, Fred P., Perryville
Utterman, William F., Perryville

PETTIS COUNTY MEDICAL SOCIETY
(Sedalia)

Beckemeyer, William A., 500 W. 16th St.
Bess, William E., 210½ S. Ohio St.
Boger, James W., 500 W. 16th St.
Brady, Charles H., Gordon Bldg.
Campbell, A. J., 312½ S. Ohio St.
Carlisle, John B., 314 S. Ohio St.
Dyer, David P., Sedalia Trust Bldg.
Edwards, D. R., 700 Limit Ave.
Ewert, J. O., 412½ S. Ohio St.
Fisher, Stanley D., Sedalia
Gonser, Karl B., 101 S. Ohio St.
Hite, Henry A., Green Ridge
Hopkins, Thomas J., 700 S. Limit Ave.
Hopkins, Thomas S., 1609 S. Limit Ave.
Lamy, John E., 509 W. Broadway
Lemire, Robert W., Sedalia Trust Bldg.
Long, Frank B., Gordon Bldg.
Lowe, Alvin L., 1425 S. Grand Ave.
Maddox, Albert R., 116½ W. Main St.
Osborne, Charles D., 710 W. Broadway
Parkhurst, Charles L., Houstonia
Proctor, Donald C., 700 S. Limit Ave.
Rhodes, Euhlan L., Warsaw
Rodeman, John M., Gordon Bldg.
Siegel, Carl D., 1216 W. 18th St.
Siegel, Peter V., Smithton
Snavely, Edmund C., 120½ W. 5th St.
Stauffacher, C. Gordon, 700 Limit Ave.
Stewart, Robert H., Bothwell Hospital
Walker, William E., LaMonte
Walter, Archie L., 500 W. 16th St.

PHELPS COUNTY
(Mid-Missouri County Medical Society)

PIKE COUNTY MEDICAL SOCIETY

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Beckman, Donald E., 4205 Virginia Ave., St. Louis
Biggs, James B., Bowling Green
Christensen, Roger F., Louisiana
Hooker, John H., 3935 Connecticut Ave., St. Louis 16
Johnson, Q. Ray, Jr., Charity Hospital, New Orleans, La.
Lewellen, Charles H., Louisiana
Lewellen, Charles P., Louisiana
Martin, W. Joe, Louisiana
Middleton, John W., Louisiana
Scott, Clive D., Louisiana
Wilcoxen, William B., Bowling Green

PLATTE COUNTY MEDICAL SOCIETY

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Calvert, Lewis C., Weston
Jennings, Ethlyn C., Rt. 4, N. Kansas City
Parker, H. Graham, Platte City
Robinson, John A., Edgerton
Thurman, H. C., Parkville

POLK COUNTY
(Dallas-Hickory-Polk County Medical Society)

PULASKI COUNTY
(Mid-Missouri County Medical Society)

PUTNAM COUNTY
(North Central Counties Medical Society)

RALLS COUNTY
(Marion-Ralls-Shelby County Medical Society)

RANDOLPH COUNTY
(Chariton-Macon-Monroe-Randolph County Medical Society)

RAY COUNTY
(Lafayette-Ray County Medical Society)

REYNOLDS COUNTY
(Mineral Area County Medical Society)

RIPLEY COUNTY
(Butler-Ripley-Wayne County Medical Society)

ST. CHARLES COUNTY
(Lincoln-St. Charles County Medical Society)

ST. CLAIR COUNTY
(West Central Missouri Medical Society)

ST. FRANCOIS COUNTY
(Mineral Area County Medical Society)

STE. GENEVIEVE COUNTY
(Mineral Area County Medical Society)

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(St. Louis)

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Ackerman, Lauren V., 600 S. Kingshighway Blvd. 10
Adler, Benard C., 500 N. Skinker Blvd. 30
Agress, Harry, 634 N. Grand Blvd. 3
Ahern, Archibald M., 3915 Watson Rd. 9
Ahlering, George H., 950 Francis Place 5
Aitken, Louis F., 3720 Washington Blvd. 8
Albrecht, Franklin H., 245 Union Blvd. 8
Alden, Arthur M., 906 Olive St. 1
Aldrich, James T., 2621 Franklin Ave. 6
Alexander, Harry L., 4952 Maryland Ave. 10
Allen, Henry C., Clayton Medical Bldg. 5
Allen, Hollis N., 634 N. Grand Blvd. 3
Allen, Melvin A., 3701 Grandel Sq. 8
Allen, Willard M., St. Louis Maternity Hospital 10
Allen, William E., Jr., 720 N. Sarah St. 8
Altheide, J. Paul, 607 N Grand Blvd 3
Alvis, Bennett Y., 100 N. Euclid Ave. 8
Alvis, Edmund B., 100 N. Euclid Ave. 8
Anstey, George, 4660 Maryland Ave. 8
Arneson, A. N., 457 N. Kingshighway Blvd. 8

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Aronberg, Lawrence M, 4652 Maryland Ave. 8
Arzt, Franz, 1790 E. Las Olas Blvd., Ft. Lauderdale, Fla.
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Aufderheide, G. Russell, 2326 Noll Drive 36
Austin, Martin G., 119 Summit Ave., 19
Ayars, Treston R., 607 N. Grand Blvd. 3
Azzouni, J. N., 8816 Gravois Ave. 23
Backer, Matthias H., Jr., 3923 Watson Rd. 9
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Bailey, Frank A., 3108 S. Grand Blvd. 18
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Bandle, Donald F., 5400 Arsenal St. 39
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Bartlett, Willard, Jr., 634 N. Grand Blvd. 3
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Bindbeutel, D. A., 630 Westborough Place 19
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Gulick, Charles R., 100 N. Euclid Ave. 8
Gum, William R., 2227 S. Broadway 4
Gummels, Belmont B., 7359 Dale Ave. 17
Gundlach, Arthur, 2202 University St. 7
Gunn, Walter T., 4617 Dahlia Ave. 16
Guze, Lucien B., Wilshire & Sawtelle, Los Angeles, Calif.
Guze, Samuel B., 600 S. Kingshighway Blvd. 10
Gzell, Ronald, 5189 Kensington Ave. 8
Hackmeyer, Rubin, 4065 S. Grand Blvd. 18
Haddock, James N., 111 Firwood Dr. 19
Haffner, Heinz, 3720 Washington Blvd. 8
Hagan, Daniel J., 3915 Watson Rd. 9
Hagebusch, Omer E., 100 N. Euclid Ave. 8
Hall, Andy Jr., 607 N. Grand Blvd. 3
Hall, Lee A., 35 N. Central Ave. 5
Hall, Preston C., 3902 Lafayette Ave. 10
Hall, Robert A., 43 Washington Tr. 12
Hamilton, Eugene G., 8505 Delmar Blvd. 24
Hammond, John J., 634 N. Grand Blvd. 3
Hampton, Henry E., 2328 Market St. 3
Hampton, Stanley F., 3720 Washington Blvd. 8
Handler, David, 7628 Stanford Ave. 30
Hanford, Wesley W., 607 N. Grand Blvd. 3
Hankin, Norman M., 4401 Hampton Ave. 9
Hanlon, C. Rollins, 1325 S. Grand Blvd. 4
Hanna, Richard E., 5535 Delmar Blvd. 12
Hansel, French K., 634 N. Grand Blvd. 3
Hansen, David M., 2530 N. Waterford Dr., Florissant
Hanser, S. Albert, 812 Olive St. 1
Hanser, Theodore H., 3701 Grandel Sq. 8
Hardy, Joseph A., 4952 Maryland Ave. 8
Harell, Alex, 3903 Olive St. 8
Harford. Carl G., 600 S. Kingshighway Blvd. 10
Harkin, James C., 600 S. Kingshighway Blvd. 10
Harkins, William B., 3720 Washington Blvd. 8
Harmann, Martin F., 2739 N. Grand Blvd. 6
Harper, Fleming B., 600 S. Kingshighway Blvd. 10

Harris, Charles W., 5298 Page Blvd. 13
Harris, Solon P., 6826 Natural Bridge Rd. 34
Harrison, Lee B., 44 Ridgemoor Dr. 5
Harting, Hugh R., 3715 Washington Blvd. 8
Hartman, Paul T., 6376 Clayton Rd. 17
Hartmann, Alexis F., 500 S. Kingshighway 10
Hartnett, Leo J., 950 Francis Pl. 5
Hartstein, Jack, 1515 Lafayette Ave. 4
Hartwig, John A., 2807 N. Grand Blvd. 7
Hassett, Henry A., 607 N. Grand Blvd. 3
Hasson, Jack, 216 S Kingshighway Blvd. 10
Hawk, Bray O., 4660 Maryland Ave. 8
Hawker, William D., 16 Hampton Village Plaza 9
Hawkins, George L., Jr., 100 N. Euclid Ave. 8
Hayden, Loyola F., 730 Hodiamont Ave. 12
Hayek, Wesley E., 8700 Riverview Blvd. 21
Haynes, James W., 634 N. Grand Blvd. 3
Haynes, Pugh Jr., 3720 Washington Blvd. 8
Heideman, Alvah G., 508 N. Grand Blvd. 3
Heifetz, Carl J., 457 N. Kingshighway Blvd. 8
Heinbecker, Peter, Barnes Hospital 10
Henderlite, John W., 4500 Olive St. 8
Henke, Charles F., 3109 S. Grand Blvd. 18
Hennelly, John J., 16 Hampton Village Plaza 9
Henschel, Eugene V., 4401 Hampton Ave. 9
Herman, Morris, 3701 Grandel Sq. 8
Herrick, Harold C., LaGrange
Heusler, Anton F., 5400 Arsenal St. 39
Hewitt, Walter R., 7649 Delmar Blvd. 5
Heyer, Oscar C., 7223 S. Broadway 11
Hickey, Robert F., 634 N. Grand Blvd. 3
Hildreth, H. Rommel, 950 Francis Pl. 5
Hines, Arthur A., 10695 Bellefontaine Rd. 15
Hobart, Carl A., 5601 Devonshire Ave. 9
Hodges, Fred J., III, 510 S. Kingshighway Blvd. 10
Hoefer, Walter H. V., 3108 S. Grand Blvd. 18
Hoffmann, Augustin D., 6222 Delor St. 9
Hofstatter, Leopold, 16 Hampton Village Plaza 9
Hofstatter, Lilli, 10053 Lakeside Dr. 23
Holbrook, Charles K., 9901 Diamond Dr. 15
Holdenried, William E., 4131 Tholozan Ave. 16
Hollo, Vencel W., 4960 Laclede Ave. 8
Holt, Earl P., Jr., 7160 Washington Ave. 5
Holtz, Alan S., 333 S. Kirkwood Rd. 22
Homan, J. S., 8641 Moran Place 14
Honich, Nicholas J., 8902 Riverview Blvd. 21
Horner, John L., 114 N. Taylor Ave. 8
Horwitz, Irwin B., 100 N. Euclid Ave. 8
Hosto, Leland E., 4909 Lindenwood Ave. 9
Houston, Vincent T., 7820 Carondelet St. 5
Hrdlicka, Victor E., 634 N. Grand Blvd. 3
Huber, Erwin T., 111 S. Meramec St. 5
Huck, Richard F., 9216 Clayton Rd. 24
Huggins, Albert M., 634 N. Grand Blvd. 3
Hulbert, Bernard, 462 N Taylor Ave. 8
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Humphrey, Harvey A., 510 S. Kingshighway Blvd. 10
Humphrey, James, Madison
Hutchinson, James H., Jr., 114 N. Taylor Ave. 8
Hutto, A. Herman, 4500 Olive St. 8
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Hyman, Anna, 5400 Arsenal St. 39
Hyndman, Charles E., 3720 Washington Blvd. 8
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Ittner, George W., Jr., 600 N. Union Blvd. 8
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Jacobs, Charles C., 936 Smithshire Ave. 21
James, Norman A., 8321 N. Broadway 15
James, William M., 3720 Washington Blvd. 8
Janney, James G., Jr., 35 N. Central Ave. 5
Jaudon, Joseph C., 950 Francis Place 5
Javaux, Everett J., 607 N. Grand Blvd. 3
Jean, J. Ted, 4500 West Pine Blvd. 8
Jensen, J. Ernest, 607 N. Grand Blvd. 3
Johnson, David S., 1430 Carroll St. 4
Johnson, Mitchell D., 40 N. Florissant Ave. 35
Johnstone, John, Jr., 206 W. Argonne St. 22
Jones, Andrew B., 3720 Washington Blvd. 8
Jones, Augustin, 634 N. Grand Blvd. 3
Jones, Grey, 4500 Olive St. 8
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Jones, Richard A., 332 Calvert Ave. 14
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Judy, Joseph, 111 Church St. 35
Jungk, Carl G. W., 3827 Flora Place 10
Kamakas, Nicholas, 937 Airport Rd. 35
Kane, Clyde E., 706 Walton Ave. 8
Kane, R. Emmet, 1117 N. Grand Blvd. 6
Kaplan, Albert, 726 Country Club Dr. 21
Kappesser, Netajean B., 7044 Lindell Blvd. 5
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Karandjeff, A. D., 508 N. Grand Blvd. 3
Karl, Michael M., 4652 Maryland Ave. 8
Kaskie, Clifford R., 35 N. Central Ave. 5
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Keim, John P., 2730 McNair Ave. 18
Keller, Joseph M., 508 N. Grand Blvd. 3
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Klinge, Frederick W., 16 Hampton Village Plaza 9
Klippel, Bernhardt W., 3701 Grandel Sq. 8
Klym, Nicholas, 3701 N. 25th St. 7
Kneal, E. Ellsworth, 634 N. Grand Blvd. 3
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Kurz, Rudolph F., 112 N. 4th St. 2
Kutryb, Walter J., 6000 W. Florissant Ave. 20
Ladd, Charles B., 7430 Virginia Ave. 11
LaDriere, Raymond J., 35 N. Central Ave. 5
Lakes, John D., 706 S. State St., Litchfield, Ill.
Lam, Robert L., 100 N. Euclid Ave. 8
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Ley, Albert P., 640 S. Kingshighway Blvd. 10

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Peden, Joseph C., Jr., 100 N. Euclid Ave. 8
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Pennington, F. E., 27 Log Cabin Dr. 24
Pernoud, Flavius G., Jr., 841 Audubon Dr. 5
Pernoud, Michael F., 51 Frontenac Dr. 31
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Piccione, Leonard M., 18 S. Kingshighway Blvd. 8
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Pruett, Hubert S., 7449 West Florissant Ave. 20
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Hogancamp, Charles E., 333 S. Kirkwood Rd. 22
Holscher, Edward C., 41 N. Central Ave. 5
Howe, Louis F., 8806 Harrison Ave. 17
Huck, Frank F., Fenton
Hughes, Robert G., Olive & Ballas Rds., Creve Coeur
Irick, Carl C., 227 E. Lockwood Ave. 19
Jacobs, Frederick A., 111 Church St. 35
Jick, Sidney, 457 N. Kingshighway Blvd. 8
Johnson, Roy, 40 N. Florissant Rd. 35
Jones, Dorothy J., 110 S. Central Ave. 5
Jones, James B., 9335 Sonora Ave. 17
Jones, Victor, 2240 St. Clair 17
Joseph, Harold J., 227 Tanglewood Dr. 24
Jotte, Richard F., 10300 St. Charles Rd., St. Ann
Kahn, Lawrence, 101 S. Meramec St. 5
Kardesch, Milton, 9316 Lodge Pole Lane 26
Karsh, Robert S., 8339 Delcrest Dr. 5
Kelley, Walter L., 9915 Gravois Rd. 23
Kempinsky, Warren H., McMillan Hospital 10
Kendis, Joseph B., 462 N. Taylor Ave. 8
Kessler, Joseph J., 3504 N. 14th St. 7
Kilker, Clarence H., 3121 N. Grand Blvd. 7
Kilker, Donald E., 3121 N. Grand Blvd. 7
Kimelman, Nathan, 21 Granada Way 24
King, Eustace E., III, 2114 E. Grand Blvd. 7
Kingsland, Robert C., 14 Forsyth Walk 5
Kipnis, David M., 1251 Buck Ave. 17
Klippel, Allen P., 1101 Donna Ct. 24
Kloeppel, Carl F., R. R. 12, Box 212, Kirkwood
Koch, Robert E., 35 N. Central Ave. 5
Koerner, Kenneth A., 950 Francis Place 5
Koessel, Arthur W., 634 N. Grand Blvd. 3
Konzelmann, John A., 6677 Delmar Blvd. 30
Kopp, Jules H., 462 N. Taylor Ave. 8
Korn, Robert L., 8230 Forsyth Blvd. 5
Krieger, John L., 7422 Cheshire Lane 23
Kurth, Robert K., 16 Hampton Village Plaza 9
Kuttner, Marianne, 8515 Delmar Blvd. 24
Lansche, W. Edward, 41 N. Central Ave. 5
Larkin, Rosemary R., 7917 Harlan Ave. 23
Lay, Obert M., 601 S. Brentwood Blvd. 5
Lerner, Abe F., 7545 Parkdale Ave. 5
Leslie, Charles H., 209 S. Kirkwood Rd. 22
Levey, Simon A., 8334 Delcrest Dr. 24
Levin, Marvin E., 7818 Stanford Ave. 30
Lewin, Wilbur H., 906 Olive St. 1
Lipschitz, Ervin, 101 S. Meramec Ave. 5
Lohr, Robert W., 610 N. Lafayette Ave., Florissant
London, Stanley L., 462 N. Taylor Ave. 8
Long, Frank B., 100 N. Euclid Ave. 8
Lord, Richard E., 16 Hampton Village Plaza 9
Loving, B. Rush, Box 154, Ballwin
Luckey, Horace L., 2816 Sutton Ave. 17
Luedde, Fullerton W., 35 N. Central Ave. 5
Lund, Herluf G., 4652 Maryland Ave. 8
Lund, Robert H., 110 S. Central Ave. 5
McCall, Edwin L., 9012 Manchester Rd. 17
McCarthy, Thomas D., 607 East Dr. 21
McClure, David N., 950 Francis Place 5
McGinnis, William F., 8230 Forsyth Blvd. 5
McKee, Oliver A., N. Kirkwood Rd. and Washington St. 22
McLean, Royal C., 520 W. Jewel Ave. 22
McManamon, Thomas V., 111 Church St. 35
McMurray, Herbert C., Ballwin
McNalley, Frank P., 950 Francis Place 5
McNalley, Michael, 950 Francis Place 5
McNearney, Joseph, 7308 Glades Ave. 17
Magee, Charles D,, 418 Olive St. 2
Magee, William E., 4952 Maryland Ave. 8
Magidson, Joseph, 615 Forest Ct. 5
Magness, Guy N., 6651 Enright Ave. 30
Mahe, George A., 135 N. Hanley Rd. 5
Manganaro, Frank J., 1617 S. Brentwood Blvd. 17
Marcus, Morris D., 607 N. Grand Blvd. 3
Marmor, William A., 607 N. Grand Blvd. 3
Martin, Frederick W., Jr., 12 Eversdale Ct. 17
Martz, John C., 237 Spencer Rd. 19
Mattis, Robert D., 21 Brentmoor Pk. 5
Maxwell, Richard W., 8126 Teasdale Ave. 30
May, Benjamin F., 7550 Delmar Blvd. 30
Mayer, Robert A., 950 Francis Place 5
Mazur, Herbert A., 8112 Delmar Blvd. 30
Meador, James R., 4 S. Central Ave. 5
Meagher, Arthur J., 3805 S. Broadway 18
Mendelson, David F., 150 N. Meramec St. 5
Mendonsa, Elsa L., 504 N. Central Ave. 5
Merrims, Theodore, 7873 Wayne Ave. 30
Merritt, Burch A., 7309 Natural Bridge Rd. 21
Merz, Jean J., 117 Frontenac Forest 31
Meyer, James E., Ballwin
Mezera, Raymond A., 7135 Forsyth Blvd. 5

Milder, Benjamin, 100 N. Euclid Ave. 8
Miles, Paul W., 100 N. Euclid Ave. 8
Miller, Charles, Jr., 206 N. Fillmore Ave. 22
Minnihan, Robert W., 915 N. Grand Blvd. 3
Missey, Wilburn C., Jr., Route 3, Box 491, Creve Coeur
Molden, Charles A., 36 Bellerive Acres 21
Monat, Seymour, 100 N. Euclid Ave. 8
Moore, Harry G., 917 S. 18th St. 3
Moore, Walter L., 6 Clayton Tr. 31
Moore, William E., 7315 Pasadena Blvd. 21
Mueller, Robert J., 16 Hampton Village Plaza 9
Mullarky, Wilbur A., 7 Beaver Dr. 24
Murphy, John C., 3720 Washington Blvd. 8
Nakada, James R., 950 Francis Place 5
Nash, W. Hampton, 915 Olive St. 1
Nelson, J. Roger, 1649 E. Swan Circle 17
Newport, Gerald, 21 Stoneyview St., Creve Coeur
Noller, Henry W., 3720 Washington Blvd. 8
Neutzel, John A., 11 Countryside Lane 31
Nussbaum, Robert A., 3701 Grandel Square 8
Oakley, John E., 601 S. Brentwood Blvd. 5
O'Connell, John, 1931 O'Connell St. 14
O'Connor, Robert J., 751 St. Francois St., Forissant
O'Keefe, Joseph D., 3720 Washington Blvd. 8
O'Neal, Patricia, 4580 Scott Ave. 10
Ott, Harold J., 2816 Sutton Ave. 17
Ottensmeyer, Charles D., 2460 Northland Ave. 14
Paddock, Richard, 6154 Westminster Place 12
Page, Jesse W.. 601 S. Brentwood Blvd. 5
Paris, William H., 3121 N. Grand Blvd. 7
Park, George M., Box 6, Eureka
Pawol, S. E., 2573 Woodson Rd. 14
Pennoyer, James, 117 Plant St. 19
Perry, H. Mitchell, 31 Hill Dr. 22
Perry, William D., 100 N. Euclid Ave., 8
Peugnet, Hubert B., 1617 S. Brentwood Blvd. 17
Phillips, Hanford, 1117 N. Union Blvd. 13
Platt. W. Rady, 57 Ridgemoor Dr. 5
Rachlin, Maxwell, 1617 S. Brentwood Ave. 17
Ragland, John E., Ballwin
Rathle, Henri, Box 12097, New Orleans, La.
Redington, James C., Jr., 1 Tuscany Pk. 5
Reese, A. Victor, 120 E. Lockwood St. 19
Reiches, Aaron J., 4500 Olive St. 8
Reilly, Pierce J., 730 Hodiamont Ave. 12
Reinhard, Edward H., 235 Sylvester Ave. 19
Reiss, Eric, 6326 Waterman Blvd. 5
Reister, Dorothy D., 814 W. 74th St., Kansas City
Reitman, Stanley, 8324 Delcrest Ave. 24
Rennard, Marvin, 4652 Maryland Ave. 8
Repp, Theodore J., 9311 Duenke Dr. 15
Reynolds, Fred, 4960 Audubon Ave. 10
Riggio, Salvatore N., 9901 Gravois Rd. 23
Roberts, Harold K., 110 S. Central Ave. 5
Roberts, John P., Barrett Station Rd. 22
Roberts, John R., 100 N. Euclid Ave. 8
Robertson, Frank G., 634 N. Grand Blvd. 3
Robinson, Edith C., 2 Briar Oak 32
Roblee, Melvin A., 101 S. Meramec Ave. 5
Rogers, C. H., 812 Olive St. 1
Rogers, John A., 527 Warren Ave. 30
Rohlfing, Edwin H., 8230 Forsyth Blvd. 24
Rolufs, Lloyd S., 109 N. Taylor Ave. 22
Roodman, Herman J., 15 N. Brentwood Blvd. 5
Rosecan, Marvin, 100 N. Euclid Ave. 8
Rosenbaum, Herbert E., 600 S. Kingshighway Blvd. 10
Rosenberg, Henry E., 1467 N. Union Blvd. 13
Ross, Herman C., 1695 Brentwood Blvd. 17
Roufa, Joseph F., 539 N. Grand Blvd. 3
Rouse, Ernest T., 100 N. Euclid Ave. 8
Rubenstein, Melvin, 4500 Olive St. 8
Ruhling, Rud[illegible] 5203 Chippewa Ave. 9
Rutledge, Paul E., 411 N. Kirkwood Rd. 22
Ryan, John J., 28 Ridgetop 17
Salisbury, William J., 3548 Sidney St. 4
Schattyn, Martyn, 539 N. Grand Blvd. 3
Schechter, Samuel E., 8000 Bonhomme Ave. 5
Scheele, Paul M., 1617 Brentwood Blvd. 17
Schluer, Elmer P., 3720 Washington Blvd. 8
Schmidt, Edmund M., 6704 W. Florissant Ave. 20
Schneider, Sam, 4652 Maryland Ave. 8
Schopp, Alvin C., 539 N. Grand Blvd. 3
Schultz, Samuel, 2813 Watson Rd. 9
Schuman, Stanley H., 8505 Delmar Blvd. 24
Schwartz, Melvin M., 4652 Maryland Ave. 8
Schwartzman, Bernard, 4652 Maryland Ave. 8
Scott, Henry F., 57 Palm Dr., Ormond Beach, Fla.
Seabaugh, Ottis D., 105 W. Lockwood Ave. 19
Seabold, John A., 408 Mission Ct. 30
Shatz, Burton A., 4652 Maryland Ave. 8
Shepherd, Charles T., 1259 N. Kingshighway Blvd. 13
Shobe, Frank O., 4500 W. Pine Blvd. 8
Silverberg, Charles, 8537 Bryan Ave. 17
Simril, Wayne A., 35 N. Central Ave. 5
Sisk, James C., 110 S. Central Ave. 5
Skilling, David M., Jr., 18 S. Kingshighway Blvd. 8
Skinner, John S., 31 Willow Hill Rd. 24
Smit, Herbert M., 3903 Olive St. 8
Smith, George E., 637 Tarrymore Lane 22
Smith, William A., Route 1, Box 122M, Somerton, Ariz.
Sommer, Ross B., 8604 White Ave. 17
Speno, Angelo A., 601 S. Brentwood Blvd. 5
Spitz, Milton A., 1108 N. 20th St., Milwaukee, Wis.
Spitzer, Ernest, 6637 Kingsbury Blvd. 30
Spoeneman, Marlin C., 7380 Overbrook Dr. 21
Staehle, Melvin E., 7124 Natural Bridge Rd. 20
Stein, Harry J., 6917 W. Florissant Ave. 20
Stein, Leonard A., 2618 Oregon Ave. 18
Steiner, Alexander J., 3720 Washington Blvd. 8
Stephens, William A., 462 N. Taylor Ave. 8
Sterling, Charles E., 8105 Page Blvd. 14
Sterling, John A., 7266 Manchester Ave. 17
Stevens, Robert W., 9311 Duenke Dr. 37
Stewart, Frances H., 7161 Delmar Blvd. 30
Stickle, A. W., 812 Olive St. 1
Stocking, Lyman C., 14 Sweetbriar Lane 22
Strauchen, Gilbert W., 337 W. Lockwood Ave. 19
Stude, William C., 16 Hampton Village Plaza 9
Stuebner, Roland W., 35 N. Central Ave. 5
Sutphin, John B., 111 Church Rd. 35
Sutter, Richard A., 7215 Greenway Ave. 30
Tashma, Sigmund, 5847 Pershing Ave. 12
Teiber, Frederick W., 3201 Washington Blvd. 3
Tenaglia, Eutimio D., 634 N. Grand Blvd. 3
Thiele, Belmont R., 10201 Thornwood Dr. 24
Thiele, O. K., 1238 Culver Hill Dr. 19
Tobias, Norman, 700 S. Meramec Ave. 5
Tomlinson, William L., 316 Camelia Ave. 19
Torin, Bernice A.. 951 Old Bonhomme Rd. 32
Townsend, James A., 915 Demun Ave. 5
Townsend, Vincent F., 3101 Sutton Ave. 17
Tremain, E. E., 2901 S. Big Bend Blvd. 17
Treiman, Robert C., 7 Radnor Rd. 22
Trueblood, Alva C., Jr., 8505 Delmar Blvd. 24
Tureen, Louis L., 457 N. Kingshighway Blvd. 8
Turner, James K., 8473 Colonial Lane 24
Ulett, George A., 54 Picardy Lane 24
Ulett, Pearl C., 54 Picardy Lane 24
Uyeno, Frank S., 8864 Flamingo Ct. 17
Valach, Frank J., 1617 S. Brentwood Blvd. 17
Vatterott, Paul B., 10300 St. Charles Rd., St. Ann
Vinyard, Paul, 3718 Olive St. 8
Vitale, Anthony J., 7130 Natural Bridge Rd. 34
Vitale, Nicholas S., 7130 Natural Bridge Rd. 34
Vizgird, J. J., 3511 University St. 7
Vollmar, Clarence J., 55 W. Big Bend Blvd. 19
Votaw, Robert E., 10 Warson Tr. 24
Walker, Willard B., 110 S. Central Ave. 5
Wall, Albert, 5322 Helen Ave. 20
Walther, Roy A., Jr., 7 High Acres 32
Waters, E. B., 126 E. Jefferson Ave. 22
Weber, Sol, 607 N. Grand Blvd. 3
Weber, William K., 3938 Canterbury Dr. 21
Weinhaus, Robert S., 7165 Delmar Blvd. 30
Weisbrod, Wilfred B., 438 Lawrence St., W., Toronto, Canada
Weisman, Renate D., 10517 St. Charles Rd., St. Ann
Weisman, Sol, 4652 Maryland Ave. 8
Weiss, James M. A., 7150 Willow Tree Lane 30
Weitman, Maximilian, 3530 Arsenal St. 18
Wenneker, Alvin S., 950 Francis Place 5
Werth, Duncan S., 233 N. Sappington Rd. 22
West, Joseph W., 906 Olive St. 1
Westphaelinger, Henry F., 10019 Grosvenor Place 15
Westrup, Arthur W., 204 E. Big Bend Rd. 22
Westrup, Ellsworth A., 14 N. Taylor Woods 22
Whitener, Paul R., 2403 Brown Rd. 14
Wiedershine, Leonard J., 634 N. Grand Blvd. 3
Williamson, O. E., 6336 Clayton Rd. 17
Wissmath, Frank S., 35 N. Central Ave. 5
Wittler, Harry A., 2817 Manderly Dr. 17
Wood, James A., Clayton Medical Bldg. 5
Wulff, George J. L., Jr., 6 Graybridge Lane 24
Wyatt, Lois C.. 134 W. Adams Ave. 22
Yanow, Mitchell, 201 S. Central Ave. 5
Yost, Walter B., 118 N. Clay Ave., Hinsdale, Ill.
Young, John S., 1126 St. Louis Ave. 6
Zeitler, Walter A., 2554 Hord Ave. 36
Zimmerman, Herbert B., 8026 Comstock St. 14
Zuckner, Jack, 4500 Olive St. 8

SALINE COUNTY MEDICAL SOCIETY

Aiken, George, Marshall
Aiken, Richard F., Marshall
Bickford, Wallace M., Miami, Fla.
Blaylock, Robert W., Marshall
Bowdish, Palmer R., Marshall
Day, Anthony B., Marshall
Haynes, Robert C., Marshall
Johns, G. A., Marshall
Jones, Ralph H., 420 16th Ave., S. W., Rochester, Minn.
Knipschild, B. F., Marshall
Lawless, Charles L., Marshall
Lawrence, John R., Marshall
Lockwood, W. E., Slater
McBurney, C. A., Slater
McCorkle, E. Lee, Marshall
Madison, Waite H., Marshall
Mead, Samuel T., Slater
Nix, Winston K., Marshall
Reid, James A., Marshall
Roberts, Paul A., Sweet Springs
Roehrs, Marvin E., Marshall
Sullivan, B. Hazard, Miami
Worley, Charles A., Sweet Springs

SCHUYLER COUNTY
(North Central Counties Medical Society)

SCOTLAND COUNTY
(Lewis-Clark-Scotland County Medical Society)

SCOTT COUNTY
(Semo County Medical Society)

SEMO COUNTY MEDICAL SOCIETY
(Stoddard-New Madrid-Mississippi-Scott Counties)

Bruce, Leo A., Sikeston
Buckthorpe, Thelma C., Sikeston

Chandler, Orville B., New Madrid
Comeau, Richard, Dexter
Critchlow, William C., Sikeston
Davis, Wilbur L., Charleston
Dernoncourt, John E., Charleston
Dieckman, William C., Dexter
Dunaway, Howard A., Sikeston
Ellis, Burnett E., Gideon
Ferguson, Wilson J., Sikeston
Finney, William O., Chaffee
Franklin, Ralph, Kern County Hospital, Bakerfields, Calif.
Frazier, Robert L., Charleston
Heeb, Max A., Sikeston
Husted, George W., Parma
Jones, Edward E., Lilbourn
McClure, Thomas C., Sikeston
Marshall, Alfred H., Charleston
Martin, Andrew D., Sikeston
O'Dell, Timothy T., Oran
Parks, Stephen, Bloomfield
Popp, Carl G., Sikeston
Reeder, Charles C., New Madrid
Roberson, John H., Lilbourn
Rolwing, E. Charles, Charleston
Sample, George A., Chaffee
Sargent, Alden P., Sikeston
Sargent, John P., Sikeston
Sarno, S. M., Morehouse
Smith, Audra B., Sikeston
Smith, Louis J., New Madrid
Throgmorton, Howard B., Sikeston
Tribble, Robert E., Chaffee
Urban, Edgar D., Sikeston
Waddle, Theodore L., Dexter
Waltrip, Roy T., Jr., Sikeston
Whitaker, Topsey T. H., East Prairie

SHANNON COUNTY
(Carter-Sannon County Medical Society)

SHELBY COUNTY
(Marion-Ralls-Shelby County Medical Society)

SOUTH CENTRAL COUNTIES MEDICAL SOCIETIES
(Howell-Oregon-Texas-Wright-Douglas-Ozark Counties)

Beckman, Paul H., Houston
Burns, Thomas J., Houston
Callihan, C. F., West Plains
Connor, Samuel W., Mountain Grove
Cooper, Claude W., Thayer
Denney, Richard W., Mountain Grove
Doan, Deborah, Bakersfield
Fowler, Marvin L., West Plains
Frame, Homer G., 1216 Cherry St., Springfield
Gentry, Marvin C., Ava
Hogg, Garrett S., Jr., Cabool
Lytle, J. E., Mammoth Springs, Ark.
Miller, Harold W., Willow Springs
Mott, James R., Hartville
Norman, Robert M., Ava
Randall, Leslie, Licking
Smith, Rollin H., West Plains
Spears, Joe L., Cabool
Tarr, John R., Houston
Tiffany, D. E., Mountain View
Walker, Ambrose T., Mammoth Springs, Ark.
Walton, Marion C., Mountain View
Wilbur, David G., Cabool
Wiles, Jack N., West Plains

STODDARD COUNTY
(Semo County Medical Society)

STONE COUNTY
(Ozarks County Medical Society)

SULLIVAN COUNTY
(North Central Counties Medical Society)

TANEY COUNTY
(Ozarks County Medical Society)

TEXAS COUNTY
(South Central Counties Medical Society)

VERNON COUNTY
(West Central Missouri Medical Society)

WARREN COUNTY
(Franklin-Gasconade-Warren County Medical Society)

WASHINGTON COUNTY
(Mineral Area County Medical Society)

WAYNE COUNTY
(Butler-Ripley-Wayne County Medical Society)

WEBSTER COUNTY MEDICAL SOCIETY

Beers, Ellsworth G., Seymour
Macdonnell, Carey R., Marshfield
Macdonnell, Thomas M., Marshfield

WEST CENTRAL MISSOURI MEDICAL SOCIETY
(Bates-Cass-Cedar-St. Clair-Vernon Counties)

Allen, Claude J., Rich Hill
Allen, William H., Nevada
Allen, William H., Jr., Hume
Barger, O. B., Harrisonville
Barone, Paul L., Nevada
Beckman, William, Strasburg
Brownsberger, Robert H., Appleton City
Cooper, John M., Butler
Davis, C. Braxton, Nevada
Doggett, Sylvester, Cape Girardeau
Eklund, Alfred W., Pleasant Hill
Ellett, William H., Appleton City
Ellis, Coburn H., Garden City
Giesler, Donald H., Osceola
Hansen, Arthur L., Butler
Hartwell, Basil O., Drexel
Jones, Edward S., Harrisonville
King, Elbert R., R. R. 4, Boise, Idaho
LaHue, L. D., Butler
Long, David S., Harrisonville
Love, Walter S., Nevada
Lusk, Charles A., Jr., Butler
Luter, Carter W., Butler
McCann, Louis P., Nevada
Magee, Robert L., El Dorado Springs
Martin, Forrest L., Nevada
Moody, Jackson C., Harrisonville
Morrison, G. B., Nevada
Pascoe, James J., Nevada
Pearse, Roy W., Jr., Nevada
Pickens, E. Allen, Nevada
Richter, William B., Stockton
Robinson, Edward E., Adrian
Ronald, Douglas C., Butler
Shrout, Cecil B., Bunceton
Taylor, J. E., Pleasant Hill
Todd, Thomas B., Nevada
Tracy, Herbert A., Belton
Wray, Rolla B., Nevada

WORTH COUNTY
(Nodaway-Holt-Atchison-Gentry-Worth County Medical Society)

WRIGHT COUNTY
(South Central Counties Medical Society)

Curiosa et Trivia

William B. McCunniff

Since a member of the United States Supreme Court cannot be removed from office for incompetency, Associate Justice Henry Baldwin served from 1830 to 1844, although admittedly mentally deranged for most of these years.

It is estimated that the 50,000 American retail pharmacies are visited by about 25,000,000 people a day. In the course of a year, these people have about 642,000,000 prescriptions filled.

Majority rule? For every American who thinks water fluoridation is useless in the prevention of dental caries, there are three who consider it beneficial. Yet, only one out of three citizens using public water supplies is provided with fluoridated water.

The U. S. Coast Guard, descendant of the U. S. Life-Saving Service, owes its origin to a physician, William A. Newell, who, as a Senator, was appalled by loss of life in shipwrecks. Later, he helped establish the Federal Agricultural Bureau, and served as Governor of New Jersey.

Capsule Clinics

- Statistically, there is less than one chance in a thousand that an uncomplicated operation will produce SGO-T values within the range that is diagnostic of acute myocardial infarction. Pearson and Judge, Arch. Surg. **77**:892, 1958.

- Reserpine was less effective than disulfiram in maintaining sobriety in 48 alcoholics. Reinert, Quart. J. Alcohol **19**:617, 1958.

- Administration of LSD-25 to normal subjects significantly impaired abstract thinking. The difference in scores under control and under drug conditions resembled the difference in scores of normal subjects and chronic schizophrenics. Silverstein and Klee, Arch. Neurol. & Psychiat. **80**:477, 1958.

- Injection of blood plasma obtained from schizophrenic patients into rats produces a syndrome resembling that produced by injection of LSD. Winter and Flataker, Arch. Neurol. & Psychiat. **80**:441, 1958.

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WASHINGTON

Briefly, H.R. 4700, generally termed the Forand Bill, would amend the Social Security Act by providing hospital, nursing home and surgical services for persons eligible for old-age and survivors benefits. The bill was introduced by Aime Forand (D), Rhode Island, on February 18, 1959. Hearings were scheduled for the middle of July and press time precludes a report on the outcome of these hearings.

In definition of the bill, surgical services means surgical procedures provided in a hospital or in case of emergencies or minor surgery provided in the hospital's out-patient department or in a doctor's office. Oral surgery by a licensed dentist is included in the term if it is provided in a hospital. The term is not meant to cover elective surgery. The individual may select the surgeon of his choice but the surgeon must be certified by a surgery board, be a fellow of the American College of Surgeons or be on the attending surgical staff of a hospital accredited by the Joint Commission on the Accreditation of Hospitals. However, the surgeon must have entered into an agreement to provide such services, either individually or through an association or organization authorized by surgeons, dentists or physicians to act on their behalf.

The benefits provided for in this bill would be financed by an increase in the Social Security tax rate.

Since 1943 "socialized medicine" bills have been introduced in each session of Congress, most of them based on changing the Social Security Act. The Wagner-Murray-Dingell National Health Insurance bill, introduced in 1943, proposed amending the Social Security Act to set up a government health insurance program providing comprehensive hospital and medical services for the entire population. During the 82nd Congress, legislation was introduced proposing the addition of hospitalization benefits to the OASI program. Similar bills were introduced in the 83rd and 84th Congresses. In 1957 Forand introduced H.R. 9467 which added surgical, dental and nursing home services for individuals entitled to retirement or survivorship benefits under OASDI. This bill did not receive favorable consideration during the last Congress.

A hearing on the Keogh-Simpson bill, H.R. 10, was held on June 17 and 18. Representatives of more than 70 organizations requested the opportunity to appear before the Committee. The A.M.A. was represented by Dr. George M. Fister, chairman of the Council on Legislative Activities and a member of the Board of Trustees, and Dr. Vincent W. Archer, state legislative keyman from Virginia.

Since there was not enough time to hear all witnesses who wished to appear, it was expected that further hearings would be held in July.

Unanimously approved early in July by the Senate Post Office and Civil Service Committee was S. 2162, the bill authorizing contributory medical care and hospitalization insurance for about 2 million federal employees and their dependents. It is estimated that the cost would be $145 million annually. The bill would become effective in June 1960 if successfully passed.

The question of aid to medical schools has become entangled with the Senate's action recommending $200 million more for medical research grants than the White House requested. Secretary of HEW Fleming warned that this increase in research money would create a need for from 5,000 to 6,000 more M.D.'s and Ph.D.'s to carry out these projects, and that if they were not forthcoming from other sources, as added medical graduates, both clinical medicine and medical education would suffer.

Opposition to social security coverage for physicians has been consistent by the A.M.A. although some members of the medical profession have declared themselves interested, in some cases whole county medical societies going on record as being in favor of this coverage. But the majority of physicians remain opposed and resolutions urging inclusion under social security for physicians were easily defeated at the recent A.M.A. session.

That resolutions were introduced shows that there is the desire to come under social security by many, if not the majority, of physicians. One senator, Robert S. Kerr, Oklahoma, recently decided he would find out for himself what the medical profession wished and polled the physicians in his state. Of 1,193 who responded, 712 were opposed to coverage, 466 favored it, and 15 already had qualified by one means or another.

Possibly such reports caused Representative Wallhause, N. J., to introduce a "take your choice" bill recently. The bill, H.R. 7295, would extend compulsory social security coverage to self-employed physicians. However, any individual who is a doctor of medicine on the date that the law would become effective would have the option of withdrawing from the plan. The option would be exercised by filing a certificate which would state that the physician does not desire social security coverage, and the certificate would be irrevocable. The physician would have possibly a couple of years to come to his decision as the certificate would have to be filed no later than the due date of the individual's income tax return for the second taxable year after the proposal would become law. It evidently would give future physicians no choice in the matter. The bill was referred to the House Ways and Means Committee.

Pertinent information for doctors about

KENT'S SUPER-POROUS MICROPORE PAPER

With the intensive publicity being given to porous cigarette paper in recent weeks, Kent believes that doctors would be interested in knowing the scientific facts about the paper used in today's Kent cigarettes.

Kent's exclusive super-porous Micropore paper lets cool air in, lets heat escape through microscopic pores in the paper. The increased oxygen in the tobacco cylinder brings about more complete combustion of the tobaccos. As a result, Kent smokers have been getting a cooler, cleaner, fresher taste in smoking.

When the advantages of Kent's Micropore paper are coupled to Kent's other superiorities, it is easy to understand why more people, during the past year, changed to Kent than to any other cigarette in America.

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Senate Bill No. 50 Is Enacted Into Law

T. R. O'Brien

Senate Bill No. 50, having passed both houses of the Legislature, was signed by Governor Blair on June 18. It will become effective on August 29. The entire bill as finally passed is published that all members may have the opportunity to study it.

(Truly Agreed to and Finally Passed)
Senate Bill No. 50
70th General Assembly
An Act

To repeal Sections 334.010 to 334.220, inclusive, RSMo, being all of Chapter 334, relating to practitioners of medicine, surgery and midwifery, and to repeal Sections 337.010 to 337.090, inclusive, RSMo, being all of Chapter 337, relating to practitioners of osteopathy, and to enact in lieu thereof twenty-two new sections relating to the practice of the healing arts in the State of Missouri, creating a state board of registration for the healing arts, providing for the licensing of all physicians and surgeons and the annual registration of physicians and surgeons and midwives, and granting to said board of registration for the healing arts authority for supervision and regulation of the professions licensed and registered by it, with penalties for the violation of the act.

IN THE LEGISLATURE

Be it enacted by the General Assembly of the State of Missouri, as follows:

Section A. Sections 334.010 to 334.220, inclusive, RSMo, being all of Chapter 334, relating to practitioners of medicine, surgery, and midwifery, and Sections 337.010 to 337.090, inclusive, RSMo, being all of Chapter 337, relating to practitioners of osteopathy, are hereby repealed, and there is hereby enacted in lieu thereof twenty-two new sections relating to the practice of the healing arts in the State of Missouri, said new sections to read as follows:

Section 1. Whenever used in this act, unless expressly stated otherwise, the term "Board" means the State Board of Registration for the Healing Arts in the State of Missouri.

Section 2. 1. There is hereby created and established a board to be known as "The State Board of Registration for the Healing Arts" for the purpose of registering, licensing and supervising all physicians and surgeons, and midwives in this state. The board shall consist of seven members to be appointed by the Governor by and with the advice and consent of the Senate, five of whom shall be graduates of professional schools approved and accredited as reputable by the American Medical Association and two of whom shall be graduates of professional schools approved and accredited as reputable by the American Osteopathic Association, and all of whom shall be duly licensed and registered as physicians and surgeons under the laws of this state. Each member must have been a resident of this state for a period of at least five consecutive years next preceding his appointment and shall have been actively engaged during said time in the lawful and ethical practice of the profession of physician and surgeon. Not more than four members shall be affiliated with the same political party. The first members of the board herein created shall be appointed as follows: two members for a term of two years, two members for a term of three years, and three members for a term of four years; and thereafter all members shall be appointed for a term of four years. Each member of the board shall receive $25.00 per day and his actual and necessary expenses for the time actually employed in the discharge of his duties.

2. The board shall elect its own president and secretary, each to serve for a term of one year, and shall maintain an office and employ an executive secretary and such other employees, referees, and professional personnel as the board in its discretion deems necessary, who shall perform such duties as the board directs. Without limiting the foregoing, the board is specifically authorized to obtain the services of specially trained and qualified persons or organizations to assist in conducting examinations of applicants for licenses. The executive secretary shall have the degree of Bachelor of Arts or its equivalent in college credits. The board shall meet annually in Jefferson City and at such other times and places as the members of the board may designate, and shall keep a record of its proceedings and a register of all applicants for certificates of licensure. The records and register shall be prima facie evidence of all matters recorded therein. Four members of the board shall constitute a quorum, at least one of whom shall be a graduate of a professional school approved and accredited as reputable by the American Medical Association, and at least one of whom shall be a graduate of a professional school approved and accredited as reputable by the American Osteopathic Association.

3. The board shall have a common seal and shall formulate rules and regulations to govern its actions. Provision shall be made by the Division of Public Buildings for office facilities in Jefferson

(Continued on page 960)

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Across Missouri

The National Science Fair has accepted an invitation from Kansas City to convene there in 1961. It is expected that 400 of the top young scientists of the country will have exhibits. The growth and importance of these fairs is typified by Kansas City itself. The first fair held in Kansas City was in 1952 with 438 exhibits, principally made up of collections. This year there were 1,895 exhibits, culled from 8,000 entries, and a Kansas City exhibitor won third place in the nation. As the *Kansas City Times* says, "It will focus, if only briefly, national scientific attention on this region."

The Missouri Division of Employment Security estimated that there was a job gain of 8,200 among nonagricultural wage and salary workers in the St. Louis area for April over the figure for March. This means a total of 707,500 wage and salary workers compared to 699,300 for March, and a gain of 9,500 over April of 1958.

Physicians have recently located in Farmington, Kirksville, Camdenton, Poplar Bluff, Ellington, Smithville, Neosho, Washington and Manchester.

Recent reports on hospital construction in the state show that new hospitals under construction or soon to be are at Brookfield, Potosi, Carrollton, St. Joseph, Jefferson City, Sweet Springs, Doniphan, Eldorado Springs, Butler, Fredericktown, Aurora and Fayette. There have been recent additions to hospitals at the St. Francis Hospital, Mountain View; Callaway County Hospital at Fulton, and the Southeast Missouri Hospital at Cape Girardeau.

Additions under construction are at the Bothwell Hospital, Sedalia; St. Joseph's Hospital, St. Charles, and Boone County Hospital, Columbia. Additions planned in the near future are at the Skaggs Community Hospital, Branson; the Delta Community Hospital, Sikeston, and Levering Hospital, Hannibal.

New hospitals under construction are at Sullivan, Hermann, Bolivar and Dexter. The new hospital at West Plains was dedicated on March 14.

According to Dr. H. M. Hardwicke, Acting Director of the Division of Health, the mobile x-ray testing program for tuberculosis closed on July 1. The mobile x-ray units began their work in 1947. In the period since then a total of 1,590,153 x-rays were taken and 12,250 cases of suspected tuberculosis were identified. Another method of seeking out tuberculosis cases will be instituted.

Something over 2 per cent, or 902,937 acres, in the State of Missouri, is managed in so far as timber is concerned by the National Forest Service. A total of 17½ million board feet of timber was harvested and sold during the last year. In this work, some 43,314 acres have been replanted. The management of the National Forest Service has contributed to the preservation of wild life in these areas.

Missouri Business, June issue, publication of the Missouri State Chamber of Commerce, reports a new program on citizenship responsibility, the movement led by Dr. Durward G. Hall, Springfield. The review of the program as given in *Missouri Business* follows:

"The Citizenship Responsibility Program of the Missouri State Chamber of Commerce is to be extended to the congressional level. Authorization for the extension came in a late April meeting of the Board of Directors after Dr. Durward G. Hall, the chairman of the Citizenship Responsibility Council, had focused attention on these disturbing facts about the voting records compiled by members of the Missouri congressional delegation in the 85th Congress:

"Both Missouri senators voted against the interests of the Missouri business community on every one of 16 key roll call votes. So did seven of Missouri's congressmen. Two Missouri congressmen compiled mixed voting records on the issue, one failed to take any meaningful stand, and only one supported the interest of Missouri businessmen most of the time.

"In authorizing the extension of the Citizenship Responsibility Program to the congressional level so that steps can be taken to try to brighten this dismal picture, the State Chamber's Board of Directors assigned to the Citizenship Responsibility Council the important and difficult task of finding the best ways for extending the program. Dr. Hall called his Council's administrative committee together the middle of last month, and these conclusions resulted from the meeting:

"1. It is probable that some of the technics now being used in the state-level program can be applied to the new congressional-level effort. But new technics must also be developed, and an expansion of the State Chamber staff will be necessary if these are to be effective.

"2. The aim of the new program will be to develop increasing numbers of Missouri businessmen who have effective contacts with their federal senators and representatives.

"3. The program will provide for close cooperation with business organizations in other states. We'll need their help, and they'll need ours."

Attention at Pfizer Research was then directed to a new drug that would overcome this disadvantage. NIAMID significantly raises the cerebral level of *both* serotonin and norepinephrine under experimental conditions.

The dramatic discovery of NIAMID now makes available an extremely effective, safe antidepressant for the successful treatment of a full range of depressive states.

Precautions

Side effects are most often minor and mild manifestations of central nervous system stimulation, modifiable by reduction in dosage; these may take the form of restlessness, insomnia, headache, weakness, vertigo, dry mouth, and perspiration. Care should be taken when NIAMID is used with chlorothiazide compounds, since hypotensive effects have been noted in some patients receiving combined therapy—even though hypotension has rarely been noted with NIAMID alone. There has been no evidence of liver damage in patients on NIAMID; however, in patients who have any history of liver disease, the possibility of hepatic reactions should be kept in mind.

Dosage and Administration

Start with 75 mg. daily in single or divided doses. After a week or more, revise the daily dosage upward or downward, depending upon the response and tolerance, in steps of one or one-half 25 mg. tablet. Once satisfactory response has been attained, the dosage of NIAMID may be reduced gradually to the maintenance level.

The therapeutic action of NIAMID is gradual, not immediate. Many patients respond within a few days, others satisfactorily in 7 to 14 days. Some patients, particularly chronically depressed or regressed psychotics, may need substantially higher dosages (as much as 200 mg. daily has been used) and prolonged administration before responses are achieved.

Supply

NIAMID is available in: 25 mg., pink, scored tablets in bottles of 100; and 100 mg., orange, scored tablets in bottles of 100.

References

Complete bibliography and Professional Information Booklet are available on request.

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Missouri Academy of General Practice

JOHN F. PEARL, M.D.

More than 200 physicians, representing all sections of the state, attended the fourth annual Spring Clinical Conference at the University of Missouri Medical Center in Columbia, May 13, 14. Twelve hours of Category I Postgraduate credit was available to Academy members. The two-day program was especially arranged for doctors in general practice. Other than a slight too much emphasis on cardiac surgery the presentations were informative and practical from a general practice point of view. Subjects discussed included: "Diuretic Therapy"; "Amebiasis"; panel on "Current Concepts of Diabetic Therapy"; "Pathogensis of Peptic Ulcer"; "Cardiac Surgery" panel; the Cardiac Surgery Program, University of Missouri Medical Center, demonstration and panel; "The Diagnosis and Management of Rheumatic Fever"; "The Management of Peptic Ulcer," panel; "Diabetic Acidosis," and a panel on "Parasitology."

Drs. Sprague and Brown, speakers, talk with Dr. Siegel.

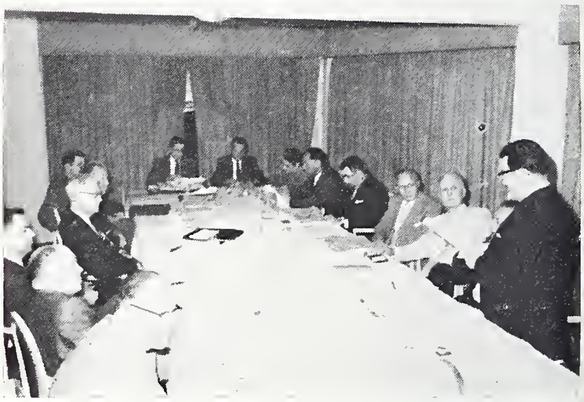
The attendance was excellent.

The conference was jointly sponsored by the University of Missouri Medical School, the Missouri Heart Association and the Missouri Academy of General Practice. Two of the outstanding speakers were sponsored by the Academy. They were Harold W. Brown, M.D., Professor of Parasitology, College of Physicians and Surgeons, Columbia University, New York; and Randall G. Sprague, M.D., Professor of Medicine, Mayo Foundation, Rochester, Minnesota.

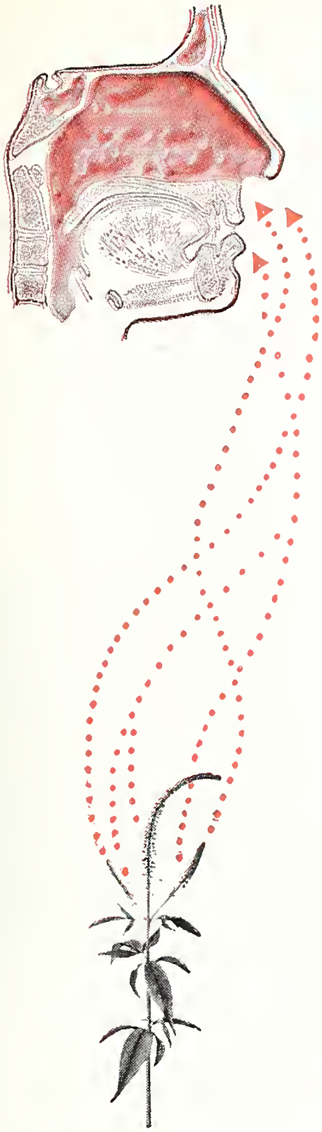
Dr. P. V. Siegel, Smithton, President of the Missouri Academy, and Dr. Wyeth Hamlin, Hannibal, Chairman, Academy Education Committee, presided at two of the four scientific sessions.

The Board of Directors of the Missouri Academy met at the Daniel Boone Hotel, Wednesday evening, May 13. A number of the board members attended both days of the Clinical Conference.

Informal conferences followed the board meeting.


The board met one evening during the conference.

Have you cancelled all your appointments for November 7 and 8, 1959? Don't forget those are the dates of our 11th Annual Scientific Assembly. St. Louis here we come.



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These antihistamines block the effect of histamine on the nasal and paranasal capillaries, preventing dilation and exudation.[3] *This is not enough;* by the time the physician is called on to provide relief, histamine damage is usually present and should be counteracted.

The decongestive action of orally active phenylpropanolamine helps contract the engorged capillaries, reducing congestion and bringing prompt relief from nasal stuffiness, rhinorrhea, sneezing and sinusitis.[4, 5]

TRIAMINIC is orally administered, systemically distributed and reaches *all* respiratory membranes, avoiding nose drop addiction and rebound congestion.[6, 7] TRIAMINIC can be prescribed for prompt relief in summer allergies, including hay fever.

References: 1. Sheldon, J. M.: Postgrad. Med. **14**:465 (Dec.) 1953. 2. Hubbard, T. F. and Berger, A. J.: Annals Allergy p. 350 (May-June) 1950. 3. Kline, B. S.: J. Allergy **19**:19 (Jan.) 1948. 4. Goodman, L. S. and Gilman, A.: Pharmacol. Basis Ther., Macmillan, New York, 1956, p. 532. 5. Fabricant, N. D.: E.E.N.T. Monthly **37**:460 (July) 1958. 6. Lhotka, F. M.: Illinois M.J. **112**:259 (Dec.) 1957. 7. Farmer, D. F.: Clin. Med. **5**:1183 (Sept.) 1958.

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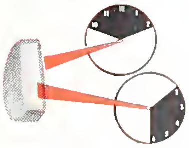

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STOP *running noses* *and open stuffed noses orally*

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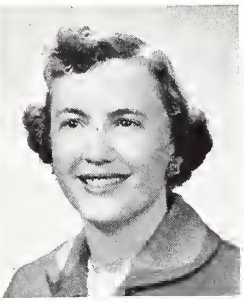
The Woman's Auxiliary

Mrs. Stanley S. Peterson

Missouri was one of the states in the limelight at the 36th National Convention in Atlantic City, because of the efforts of our immediate past president Mrs. Henry Bauman; her AMEF chairman, Mrs. Kenneth Knabb, Springfield; and her *Today's Health* chairman, Mrs. William O'Connor, St. Joseph.


Mrs. Stanley S. Peterson

It was my privilege to be one of nineteen guests at the *Today's Health* Honor Luncheon, in recognition of the fact that Auxiliary members in Missouri had sold 108 per cent of their quota.

Dr. George Lull, president of the American Medical Education Foundation, was presented a check for $137,291.04 at the Tuesday luncheon, representing the total national Auxiliary contribution this last year. Of this amount $501 was donated from Pettis County. This was the highest per capita donation in their membership group, and I was again privileged to accept for them a Special Achievement Award Certificate.

Much credit is due the Pettis County AMEF chairman, Mrs. P. V. Siegel. She and her committee persuaded druggists to contribute to AMEF at Christmas time, rather than giving individual gifts to doctors, thereby swelling the county AMEF fund.

Mrs. Durward Hall, Civil Defense Chairman for Greene County, used a bulletin board each month to give members helpful hints on home preparedness. This project was recognized at the Round Table session.

In a moment of personal conversation, Mrs. E. Arthur Underwood, 1958-59 National President, said she felt the *Missouri Quarterly Bulletin* was one of the most outstanding Auxiliary publications in the country. During the last year Mrs. Maxmilian Weitman, St. Louis County, served as editor, ably assisted by Mrs. Charles T. Shepherd, Mrs. J. Martyn Schattyn and others.

Each state president gave a report entitled "Our Best." In summarizing her report, Mrs. Bauman said, "The best Missouri offers is the emphasis put on better communications within our group and from us to the public—and better public relations through outstanding community service."

After many years of hard work in promoting the sale of *Hygeia* and *Today's Health*, members will be surprised to learn that sale of *Today's Health* has been discontinued as an Auxiliary project. Only subscriptions to individuals and organizations given in the name of the Auxiliary will be honored at the former half-price rate. More detailed information on this change will be sent to county chairmen soon. Members are urged to promote other auxiliary projects with the same zeal they devoted to *Today's Health.*

Among outstanding speakers at the meeting was Lt. Col. Ingalls H. Simmons, Director, Department of Preventive Medicine, Army Medical Service School. Entitled "General Public Health Hazards in Disasters," his talk, illustrated by slides, gave practical suggestions for home preparedness which every family could easily carry out. We will pass along these ideas at our Fall Board Meeting and in our contacts at county meetings.

Mr. Aubrey Gates, Director of Field Service Division of A.M.A., urged doctors' wives to become better acquainted with their legislative representatives, their families and office workers, as well as with people in key positions in city governments and organizations. Then when we "have a story to tell" we will know the people to whom it should be told.

Speaking on "What Every Auxiliary Member Should Know About Alcoholism," Dr. Marvin A. Block, Chairman A.M.A. Committee on Alcoholism, pointed out that every hostess has a responsibility to her guests not to force alcoholic beverages on people to whom it is literally a poison. Reprints of his helpful talk will soon be available.

Attending the breakfast for Missouri delegates Tuesday morning were Mrs. Jordan Kelling, Mrs. Ralph Perry, Mrs. Doyle Whitman, Mrs. F. C. Maples, Mrs. E. F. Butler and myself.

In accordance with instructions received at our State Convention, our six delegates voted for an amendment to the National By-laws which now provide that a member who has been dropped for nonpayment of dues may be reinstated without paying "penalty" arrears dues.

Mrs. Frank Gastineau of Indiana was installed as the new national President, and in her inaugural speech she emphasized that "Health Care of the Aged" is the main project of the Auxiliary this year, as requested by the A.M.A.

All of us who came away from the lengthy but interesting meetings felt saturated with helpful ideas and enthusiasm for the year ahead.

One of the biggest thrills of the Convention, of course, was hearing President Eisenhower address the opening meeting of the A.M.A.

Beautiful luncheons, teas and fashion shows, making new friends and renewing acquaintances from all over the country, rounded out a full convention week.

Missouri Medicine

JOURNAL OF THE MISSOURI STATE MEDICAL ASSOCIATION

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Vol. 56 August, 1959 Number 8

Spiramycin

Clinical Evaluation in Infections Due to Gram-Positive Organisms

JOHN W. BERRY, M.D., *St. Louis*

THE EMERGENCE of organisms resistant to chemotherapeutic agents in clinical practice stimulates continued efforts to evaluate new antibiotics. This is particularly true of the drugs active against the ubiquitous organisms such as the staphylococcus. Infections with these organisms are a hospital hazard for patients ill with debilitating diseases, in nurseries and in postsurgical cases.[1] Vigorous house-cleaning measures have been proposed, plus a return to established technics of asepsis, to combat these infections.[2] In addition to epidemiologic measures for control, a continued need for potent antibiotics is necessary for active treatment.[3] The present study is the evaluation of spiramycin* primarily in staphylococcic infections, although limited experience with pneumococcal pneumonia is presented also. This antibiotic was isolated in France from a strain of streptomyces ambofaciens obtained from the soil. It has been used clinically in Europe and the United States.[4, 5] Leeper et al. reported its use alone and in combination with novobiocin in a variety of infections.[6] The antibiotic has a sphere of activity similar to erythromycin. Because of this similarity, a further clinical study in gram-positive infections, particularly staphyococcic, seemed warranted.

METHOD OF STUDY

The study was divided into two parts, designed:

(1) to test the in vitro effect of the antibiotic on the hospital strains of staphylococci, and (2) to test the effect of spiramycin in vivo on combating clinical infections. The time embraced was a five-month period which began in August and extended through December 1958. The majority of patients were treated in November and December, the period of most rapid turnover for "infectious cases." The antibiotic was restricted to usage on one medical division (Unit II, St. Louis University) comprising a male and a female ward with a hospital population of approximately 100 patients. The patients were selected on the basis of the clinical evidence of infection at the time of admission. Bacteriologic examinations confirming the diagnoses were obtained by appropriate methods. A definite limitation is that spiramycin is available only in oral tablets of 250 mg. The lack of a suitable parenteral solution considerably slowed down its usage in critically ill patients. A few patients received the antibiotic by gastric inoculation through a Levine tube; however, in the majority of cases this method is not applicable and may be contraindicated. The dosage of the drug was 75 mg. per kilo of body weight divided into six doses per 24 hours. Blood levels were not done as previous studies have been reported.[4, 5] Each patient was followed carefully with daily observations by members of the hospital staff for any clinical manifestations of toxicity.

RESULTS

In Vitro Observations.—In October 1958, an accompanying medical division (Unit I, Washington University) of the hospital was surveyed to determine the number of staphylococcic isolates from the nasopharynx of the confined patients. Of the 100 patients, there were 33 isolates of pigment-producing, coagulase-positive staphylococci (S. aureus). These isolates were tested by the disk method against the usual group of antiobiotics. The antibiograms were compared and showed more than 90 per cent of the strains were resistant to penicillin, streptomycin and the tetracyclines; about 50 per cent were resistant to chloamphenicol

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From the Institute of Medical Research and Education, St. Louis City Hospital, St. Louis, Missouri.

* The Spiramycin used in these studies was obtained through the courtesy of Dr. Harold I. Bornhold, Ciba Pharmaceutical Products, Inc., Summit, N. J.

and erythromycin, and 10 per cent were resistant to novobiocin and spontin. This antibiogram compares with the patterns observed with other so-called "hospital strains" of the organisms. Confirmatory epidemiologic evidence was obtained by Phage typing* using types 47, 42C, 44A, 79, 53, 3C, 52A, 29A, 39, 42E, 3B, 44, 77, 729, Va4, 47, 47B, 3A, 54, 75, 70, 523, 52, 73, 6, 55, 42B, 80, 81. By the Phage typing method, 18 of the 33 isolates were lysed by one type, Phage 44A, most commonly found with epidemic or hospital strains of staphylococci.[7]

The following month, November 1958, all the staphylococci isolated from the entire hospital were analysed by their antibiograms. There were 57 isolates from a variety of clinical conditions. The antibiograms were in general similar to the October survey from the isolated medical division. The effect of spiramycin disk, available in 15 and 75 mg. size, on the isolated staphylococci was noted. Of the 57 streptococci isolated from the clinical infections throughout the hospital, eight were resistant to the 15 mg. disk of spiramycin but only one case of bacterial resistance to the 75 mg. disk was encountered.

Lepper observed the early emergence of spiramycin resistance in a hospital population after three months' usage of the antibiotic.[6] In view of this, the spiramycin antibiogram of the staphylococci isolated from the Unit II medical service, where the drug has been in use for three months, was compared with the other hospital staphylococci isolated. There were eight patients with two instances of spiramycin resistant organisms from the Unit II medical division as compared to 49 patient isolates from the rest of the hospital with six spiramycin-resistant organisms. Admittedly, these observations are too small to be significant. However, they do tend to emphasize the possibility of early spiramycin resistance with continued hospital use of the antibiotic.

In Vivo Observations.—Thirty-five patients with clinical infections were started on spiramycin treatment in the five-month period from August to December 1958. Twenty-one patients were dropped from the treatment series after one to five days because of bacteriologic or clinical evidence of infection with organisms outside the influence of spiramycin; or because a clinical need for parenteral treatment existed. Fourteen patients with infections due to gram-positive organisms were treated. Table 1 summarizes the clinical data on the spiramycin-treated patient group. There were nine patients with infections due to staphylococcus and five patients with pneumococcal pneumonia. In the staphylococcal group, seven were S. aureus and two were S. albus (Cases 6 and 13). Of the two S. albus isolates, one was from the blood stream (Case 6) and the other from evacuated pus of a soft tissue infection (Case 13). Tube dilution sensitivities on the organism from Case 13 showed it to be inhibited by 15.62 micrograms per cc.

There were five deaths in the group. However, two patients had a good response to the spiramycin treatment and their deaths were not related to the presence of sepsis (Cases 6 and 9). The other three patients had uncontrolled sepsis which, if not the immediate cause of death, contributed appreciably. The method for evaluation was threefold: defervescence within five days after receiving spiramycin, bacteriologic reversal and clinical improvement. A poor result represented the failure to achieve one or all of these criteria. Of the nine infections due to staphylococcus, six had a good response. Of the three failures, all had serious associated diseases. The five cases of pneumococcal pneumonia all had uniformly good results.

TABLE 1

SPIRAMYCIN TREATED INFECTIONS

Patient	*Age*	*Sex*	*Diagnosis*	*Organism*	*Associated Disease*	*Results*
1. C. D.	76	F	Gangrene, foot Bronchopneumonia	S. aureus	Diabetes mellitus	Poor. Death, sepsis.
2. S. G.	63	M	Pneumonia	D. pneumo.		Good
3. T. H.	61	M	Pneumonia	D. pneumo.	Pulmonary emphysema	Good
4. J. S.	67	M	Pneumonia	D. pneumo.	Alcoholism. Facial trauma	Good
5. F. W.	55	M	Pneumonia	S. aureus	Suicidal attempt (barbital)	Good
6. J. L.	65	M	Prostatitis, bacteremia	S. albus	Angina pectoris	Good. Sudden death (coronary)
7. C. L.	64	M	Cellulitis with Gluteal abscess	S. aureus	Polyarthritis	Poor. Death, ruptured aneurysm
8. H. G.	70	M	Pneumonia	S. aureus	Myocardial infarction	Poor. Death, congestive heart failure and sepsis.
9. L. W.	67	M	Pneumonia	S. aureus	Gastric ulcer	Good. Death, post-surgery.
10. J. T.	42	M	Pneumonia	S. aureus	Rheumatic heart disease	Good
11. J. S.	18	M	Pneumonia	D. pneumo.		Good
12. L. C.	49	M	Pneumonia	D. pneumo.	Rheumatic heart disease	Good
13. G. P.	56	F	Cellulitis, forearm. Abscess, wrist	S. albus		Good
14. P. R.	33	F	Bronchopneumonia	S. albus		Good

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* Through the courtesy of Dr. Leonard Laskowiski, St. Louis University, St. Louis, Missouri.

TOXICITY

A. *Clinical Observations.*—Of the 35 patients that were treated with spiramycin for from one to 32 days, none experienced any skin disturbances while observed. In one patient (Case 6) a nonspecific diarrhea occurred after two weeks which did not require discontinuance of the drug and cleared spontaneously. Stool cultures failed to isolate a pathogen. Another patient (Case 13) developed a similar nonspecific diarrhea which cleared, however, only after discontinuance of the drug.

B. *Laboratory Observations.*—Examinations to determine any ill effects of spiramycin upon the blood-forming organs as well as the kidneys and liver were carried out. In no case were serious side effects noted.

BLOOD

A total of 33 white blood counts and differentials were done on the 14 patients after their initial pre-drug counts. Ten of the 14 patients had total white blood cell counts of between 12,450 and 20,900 with a "shift to the left" on the differentials after three days of spiramycin. In five patients the leukocytosis persisted between six and 32 days, although clinical improvement had occurred. During the observation periods, there were no instances of a leukopenia (white blood cells less than 5,000). The hematocrits varied between 34 and 47 per cent on the control admission readings. Subsequent determinations failed to reveal a drop greater than 15 per cent in any case. It is emphasized that these observations were on the acute phase of the illnesses. The chronic effect on bone marrow function was not evaluated, although most of the patients are being followed in the medical clinic of the hospital. Erythrocyte sedimenatation rates (ESR) utilizing the Wintrobe method were done on all patients and followed weekly. This test did not prove sensitive enough, as seven patients had abnormal elevations (over 20 mm. per hour) at the time of discharge while four patients had ESRs within the normal range during their entire illness. The C reactive protein (CRP), while not uniformly done, did not seem to increase the sensitivity.

KIDNEY

There were 42 urinalyses done on the 14 patients. In six instances, prior to treatment, abnormalities varying from proteinuria to hematuria were present. In no case was there a worsening of the urinary findings. One patient with a persistent staphylococci in the urine (Case 6) showed a remarkable decrease in the total urinary colony counts after spiramycin, where other antibiotics had failed. Blood levels of urea nitrogen (BUN) prior to treatment and at weekly intervals were available on ten patients. Two patients had admission BUN's in excess of 25 mg. per cent. Six other patients showed an elevation during treatment greater than 50 per cent of their admission BUN. In all six instances the elevation was transient and post-treatment determinations were no greater than the initial "control" reading.

LIVER

A variety of liver function studies were done, including C. C. flocculation, thymol turbidity, zinc sulfate, BSP's (5 mg. per kilo dosage), total and fractional proteins, serum bilirubin, alkaline phosphatase and serum transaminase (SGOT). Collectively, there were 59 determinations on the 14 patients. There were 14 abnormal tests in three individuals prior to treatment with spiramycin. In no case was there a worsening of the particular abnormal liver function tests noted on subsequent examination. In the patients available for follow-up, no instance of liver involvement attributable to spiramycin was noted in the three-month period.

CONCLUSION

A new antibiotic with limited clinical trial has been used in a variety of infections primarily due to staphylococcus. A good response was noted in six of the nine patients with such infections. A smaller group of five patients with pneumococcal pneumonia were treated with uniformly good results. Clinical observations for toxicity have disclosed only a nonspecific diarrhea in two instances on 75 mg. per kilo dosages. Laboratorily, there was noted a transient elevation of the BUN but no worsening of the urinary findings. No instances of liver or bone marrow involvement were noted. In vitro studies have indicated that against epidemic strains of staphylococcus the antibiotic may have a useful place in the armamentarium for the clinician. The development of bacterial resistance within an early time interval may be a definite limitation to spiramycin's usefulness. The greatest limitation to the antibiotic is the failure to develop technically a parenteral preparation that is not toxic. Unless this obstacle can be overcome, further trial of the drug is valueless.

1010 Pine St.

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Volvulus of the Transverse Colon Due To Congenital Bands

DON C. WEIR, M.D., *St. Louis,* AND JULIO C. WONG, M.D.,*Colon, Panama*

VOLVULUS IS A process in which twisting of a segment of bowel may result in obstruction to the lumen and circulatory impairment to the wall. Gerwig has estimated that of every 100 cases of intestinal obstruction in the United States, seven will be due to volvulus, of which only three involve the large bowel. For unknown reasons, the European incidence is much higher, but it is clear that volvulus of the transverse portion of the large intestine is a rarity. In a collected European series, for example, volvulus of the sigmoid colon occurred in 280 cases, cecum in 140, and of the transverse colon in 14.

Examination of cases reported in the American literature reveals that acquired factors such as inflammatory adhesions or strictures secondary to previous surgical procedures account for the greater number. Volvulus of the transverse colon due to congenital bands with formation of a blind loop obstruction has not been reported heretofore to our knowledge. The hepatic and splenic flexures which are the normal points of fixation are so widely separate that torsion of the intervening segment has been deemed practically impossible, even in the presence of enteroptosis, elongated mesentery or bowel redundancy. It is our purpose to report on such a case in our experience.

CASE REPORT

M. H., an 18 year old single white female, was seen in the Medical Clinic of the Firmin Desloge Hospital on April 16, 1956, complaining of pains in the abdomen of one month's duration. The family and past history were non-contributory. There had been no previous operations or abnormal trauma. The pains were sharp, cramping, radiating from the right lower quadrant to the left, unrelated to meals, position or activity. There has been no nausea, vomiting, melena, constipation or diarrhea. Physical examination revealed mild guard in both lower quadrants, but no evidence of rebound tenderness, masses or distention. Bowel sounds were never abnormal. Rectal examination was normal.

She was treated expectantly and seen almost daily for the next two weeks. Her symptoms did not improve, nor did they worsen. The white blood cell count ranged between five and eight thousand, with a slight increase in segmented neutrophils on differential count. The stools were formed, brown and Guiac negative.

A barium enema on April 30, 1956, revealed narrowing of the lumen of the transverse colon distal to the hepatic flexure and proximal to the splenic flexure with moderate dilatation of the intervening 20 centimeter segment of large intestine. Post evacuation films clearly demonstrated torsion of the mucosal pattern at the constricted sites in the transverse colon with 180 degree rotation of the intervening segment of large intestine. Impression was volvulus of the transverse colon with partial obstruction.

The patient was admitted to the hospital on May 7, 1956, after a second barium enema which again revealed a volvulus. At this time she experienced her most acute attacks of cramping pain, vomiting on two occasions after meals. No remarkable physical signs were elicited during these attacks. After suitable bowel preparation and passage of a long tube, she was explored through a midline incision. The stomach and duodenum were normal; there was no malrotation of the small intestine. A broad band of fibrous tissue was found arising from the antimesenteric edge of the second portion of the duodenum to attach to the right half of the transverse colon distal to the hepatic flexure. Distal to the point of attachment, a dilated patulous

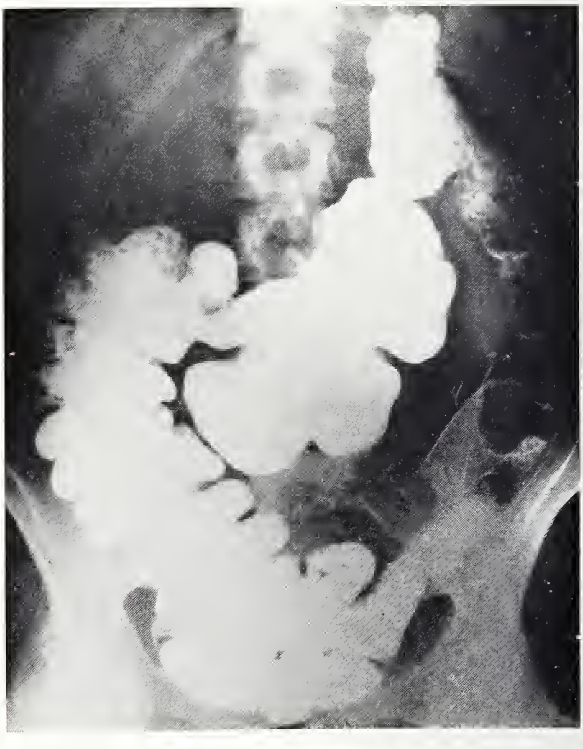

Fig. 1. Barium enema revealed constriction of the transverse colon proximal to the splenic flexure and distal to the hepatic flexure with moderate dilatation of the intervening 20 centimeter segment of large intestine.

Presented at the 1957 scientific assembly of the Missouri Academy of General Practice, Jefferson City.

segment of transverse colon could be easily rotated on its longitudinal axis to 180 degrees, with a second area of torsion proximal to the splenic flexure. This resulted in a blind loop obstruction of a 20 centimeter segment of transverse colon. The remainder of the abdominal and pelvic viscera were normal except for the ascending colon which, although in normal position, was excessively mobile and could be displaced with ease out of the working incision.

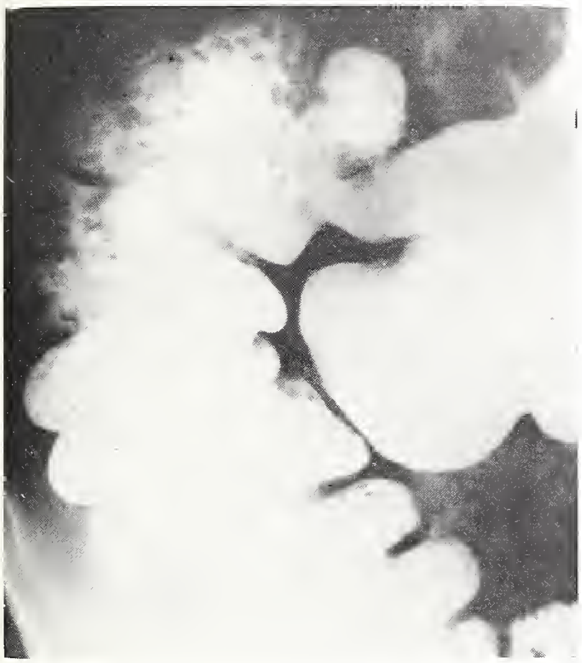

Fig. 2. Detail view of constricted segment of transverse colon just distal to hepatic flexure with evidence of a spiral mucosal pattern.

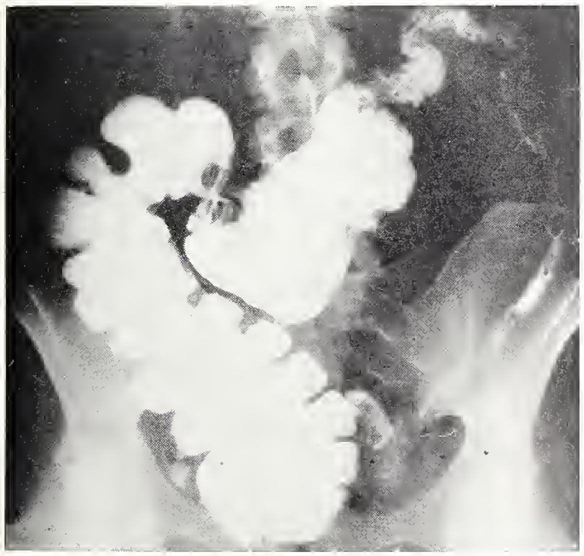

Fig. 3. Post-evaculation film showing partial obstruction of the transverse colon proximal to the splenic flexure and distal to the hepatic flexure.

A release of the bands in the right upper quadrant was performed, but the dilated loop tended to rotate of its own size and weight to the same points. A resection of the hepatic flexure was performed to include most of the transverse colon and the proximal point of rotation. The area of the splenic flexure showed no anatomic abnormalities about the second point of torsion. Continuity was established by a two layer silk anastomosis of the ascending colon to the left transverse colon.

The patient had an uneventful postoperative course and was discharged on the tenth postoperative day. Pathologic examination revealed no histologic abnormalities. Nerve ganglia were present in sufficient number to exclude megacolon. There had been complete relief of symptoms.

DISCUSSION

This patient undoubtedly had recurrent bouts of partial blind loop obstruction of the transverse colon as the basis of her symptoms. The finding of congenital bands from duodenum to transverse colon, not dissimilar to those seen in infants with malrotation of the intestines and duodenal obstruction, located precisely at the point of torsion in the right transverse colon, suggest that these were the initiating factor in the formation of the volvulus. A second point of axial rotation occurring proximal to the splenic flexure must have trapped the contents in the intervening loop, and distension could occur if intestinal gas and contents intermittently entered the loop proximally. The sequence of events suggests that with recurrent bouts of volvulus, the loop progressively distended and prone to ptosis, which in turn enhanced the tendency to volvulus formation, perpetuating the vicious cycle. The presence of abnormally close points of fixation, enteroptosis, redundancy of bowel and mesentery were thus all in evidence in this case.

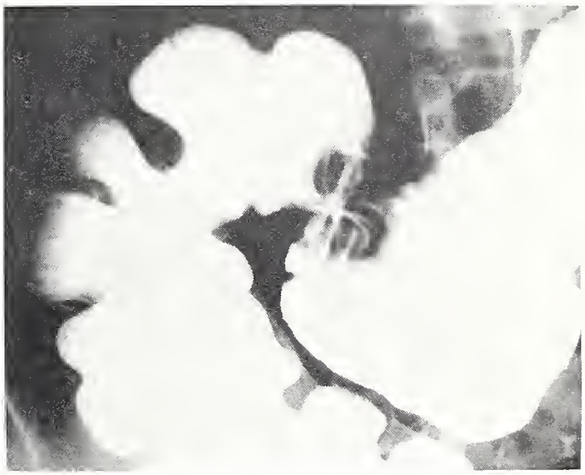

Fig. 4. Detail study of the mucosal pattern at the constricted site in the transverse colon distal to the hepatic flexure conclusively demonstrates the presence of volvulus with 180 degree rotation of the colon.

Intractable Heart Failure

A Study of Underlying Factors

JOHN A. NUETZEL, M.D., *Clayton*

THE DIAGNOSTIC exercises necessary when dealing with refractory or intractable congestive heart failure have been the subject of several detailed reviews.[1, 2, 3, 4] These have pointed out the possible influential coexistence of many cardiac and non-cardiac factors which must be considered before accepting this frustrating situation as the end stage of an inherently inadequate circulatory apparatus. Advances in medical and surgical therapy offer hope in appropriate cases if these underlying factors are considered and identified.

The multitude of possible participating factors make desirable a simple frame of reference in which to consider these cases. In essence two questions must be asked: (1) Is the primary cardiac diagnosis correct? (2) Is a complicating factor present which is causing failure of therapy?

Is the primary cardiac diagnosis correct? This question is of course raised in order to identify undiagnosed conditions which might be amenable to medical or surgical therapy different from that being used. The presence of myocarditis, bacterial endocarditis, active rheumatic carditis or myocardial infarction may point to specific medical therapy. Constrictive pericarditis, arteriovenous fistula, mitral stenosis and other valvular deformities, myxoma and congenital lesions such as patent ductus arteriosus may prove amenable to a surgical approach. Under this heading one must also consider the many conditions arising remote from the heart and systemic circulation which may have been overlooked as a primary cause of the cardiac state. Undiagnosed anemia, malnutrition, beriberi heart, primary amyloidosis, hyperthyroidism, myxedema, pheochromocytoma, primary pulmonary vascular disease, pulmonary embolization, Paget's disease, metastatic carcinoma, various collagen and granulomatous diseases including lupus and sarcoidosis must all be considered.

Is a complicating factor present leading to failure of treatment? Of course many of the entities considered previously, e.g., pulmonary embolism, may be present in addition to a known primary cardiac condition and lead to intractability. One must also consider, in the hope of identifying a correctable condition, the existence of hypertension, cardiac arrhythmias, infection, nephrosis, effusions, tamponade, malnutrition, obesity, hypoproteinemia, hepatic cirrhosis and disorders sometimes iatrogenic such as electrolyte imbalances, errors in digitalization and in salt restriction.

Finally, one must unfortunately conclude at times that the heart and circulation are no longer capable of performing their function and that the pathologic process has finally outstripped compensatory therapeutic measures.

This study has been carried out to determine the incidence and relative importance of these factors in cases of intractable heart failure coming to autopsy on a private medical service.

MATERIALS AND METHODS

Two hundred sixteen autopsied cases diagnosed as having cardiovascular disease in the years 1951 through the first half of 1957 were studied. From these, 44 cases exhibiting unequivocally the clinical syndrome of intractable congestive heart failure were selected and were examined to determine the incidence of various factors considered instrumental in the production of intractability. There were 24 females and 20 males with an age range of 21 to 88 years. Their average age was 63. These patients had displayed marked dyspnea, orthopnea and edema unresponsive to usual therapy including digitalis and diuretic agents. All had marked chronic passive congestion at autopsy. Cases hospitalized less than 24 hours were excluded and in no case was the present episode of failure less than

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From the Medical Service, Saint Mary's Hospital, and the Department of Internal Medicine, Saint Louis University School of Medicine, Saint Louis, Missouri.

Assistant Professor of Clinical Medicine, St. Louis University School of Medicine.

Volvulus—Continued

SUMMARY

An unusual case of volvulus of the transverse colon is presented. The diagnosis was made by the roentgen findings and confirmed at laparotomy. Congenital bands between duodenum and transverse colon appeared to cause a blind loop obstruction of a segment of bowel between two points of axial torsion.

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three days. Most cases exhibited a long history of bouts of failure, the average duration of the terminal episode being 30 days. Although the possibility of subjective error in selection cannot be excluded in a study of this type, an effort was made to exclude those cases in failure who expired but in whom marked unresponsiveness to treatment was not demonstrated. Thus many cases of failure following myocardial infarction who died suddenly were excluded.

RESULTS

I. *Type of Primary Heart Disease*

Postmortem diagnosis of primary type of heart disease present is illustrated in table 1.

TABLE 1

PRIMARY UNDERLYING DISORDER AT AUTOPSY

		Total
Arteriosclerotic Cardiovascular Disease		16
With recent myocardial infarction	7	
Hypertensive and Arteriosclerotic Cardiovascular Disease		6
With recent myocardial infarction	2	
With recent coronary thrombosis only	1	
Hypertensive Cardiovascular Disease		3
In accelerated phase	1	
With chronic pyelonephritis	1	
With chronic glomerulonephritis	1	
Diabetic Glomerulosclerosis		3
All with arteriosclerotic cardiovascular disease		
Rheumatic Heart Disease		16
With mitral stenosis	6	
With calcific aortic stenosis	5	
With mitral and aortic stenosis	4	
With aortic stenosis and bacterial endocarditis	1	
GRAND TOTAL		44

Arteriosclerotic and rheumatic cardiovascular disease predominated. There were three cases of Kimmelstiel-Wilson lesion coexisting with arteriosclerotic heart disease as well as one case of chronic pyelonephritis and one of chronic glomerulonephritis, each with hypertension but without pronounced arteriosclerosis. Although these five cases suffered primarily from a disorder remote from the heart, they presented clinically the typical picture of congestive heart failure and at postmortem examination showed chronic passive congestion and cardiac hypertrophy.

Of the six cases with mitral stenosis, insufficiency was marked clinically in two. In one patient with combined valvular disease there was severe aortic insufficiency. Cases of isolated calcific aortic stenosis have been arbitrarily listed under the rheumatic heading although there was at least some arteriosclerotic element present in all. In one case with mitral stenosis a pancarditis was present. One of the arteriosclerotic group also suffered from chronic bronchitis and significant cor pulmonale was thought to be present.

II. *Errors in Diagnosis of Primary Heart Disease*

Pathologic conditions found at postmortem examination had been misdiagnosed in life in only three instances. One patient with arteriosclerotic heart disease was diagnosed as rheumatic heart disease and one patient with mitral stenosis and aortic stenosis was diagnosed as arteriosclerotic heart disease. In the one case with chronic pyelonephritis, this was not recognized as the primary etiology of the secondary hypertension present.

III. *Errors in Identification of Complicating Factors*

The presence of undiagnosed complicating factors was by contrast quite frequent (table 2).

TABLE 2

COMPLICATING FACTORS PRESENT AT AUTOPSY

	Total	*Diagnosed Clinically*
Pulmonary embolus	17	2
Myocardial infarction, recent	9	0
Recent coronary thrombosis only	1	0
Ball valve thrombus	1	0
Renal infarcts	1	0
Carotid embolus	1	0
Splenic infarct	1	0
Bronchopneumonia	13	4
Lobar pneumonia	1	0
Bacterial endocarditis	1	1
Gastric ulcer	1	0
Pyothorax	1	0
Atelectasis	2	0
Ruptured mitral valve	1	1

Major pulmonary embolization predominated as a complication, occurring in 17 of the 44 cases or 38 per cent. Recent coronary thrombosis (estimated within six days), was present in 10 of 44 cases or 23 per cent, with frank myocardial infarction in nine. Significant pneumonia occurred in 14 or 31.5 per cent.

The total number of patients with significant thromboembolic phenomena was 25 of 44 cases or 57 per cent. Significant thromboembolic phenomena however occurred 31 times in these 25 cases. Three patients suffered both pulmonary embolization and recent myocardial infarction. There were also three with pulmonary embolus plus bronchopneumonia. Of those with recent myocardial infarction, two had bronchopneumonia and one lobar pneumonia.

There were only 12 cases without significant complicating factors. These could be thought of as "exhausted" hearts.

A. *Pulmonary Embolus*

The 17 cases of pulmonary embolization resulted in pulmonary infarction in 13. It was possible to correlate a clinical picture suggesting the onset of embolization with the onset of intractable failure in six cases and in one case the probable time of embolization correlated well with increased symptoms in a previously intractable failure. However, in 10 cases the clinical course did not suggest embolization. Embolization was therefore of questionable significance as a source of intractability and may well have been only a complication of the already severe intractable congestive failure. In no case was embolization alone considered an initiating cause of failure.

Embolization occurred in seven cases with arteriosclerotic cardiovascular disease, in three cases with mitral stenosis, in two cases with aortic stenosis and in three with combined valvular disease. The arteriosclerotic patient with chronic glomerulonephritis had embolization as did one of the arteriosclerotic patients with diabetic glomerulosclerosis.

In only two cases was pulmonary embolization diagnosed or strongly suspected clinically prior to death; in only three cases was anticoagulant treatment administered, and in only one case was it instituted before apparent onset of embolization.

Electrocardiograms were obtained in 12 cases. It was not possible to correlate electrocardiogram and embolus due to infrequent tracings often not well related to approximate time of embolus. However, in no case was there a pattern strongly suggestive of pulmonary embolization. In several instances there were suspicious patterns displaying S_1Q_3 or slight ST depression and T inversion over right ventricular precordial leads. Arrythmias, especially auricular fibrillation, were frequent but they could well have been due to the primary cardiac disease. The degree of associated disease was so great and the number of electrocardiograms so few as to prohibit analysis of relation of arrythmias to embolization.

In five instances embolization was bilateral to major pulmonary vessels. In five additional cases massive multiple bilateral embolization occurred and in seven cases there was embolization to a single lobe.

B. *Coronary Thrombosis and Myocardial Infarction*

Of the 25 cases of arteriosclerotic heart disease, 14 evidenced coronary thrombosis. Four showed only old infarction. Of the 10 with recent coronary thrombosis eight exhibited old infarction as well.

In the 10 cases with recent coronary thrombosis (23 per cent), (nine frank infarcts), this diagnosis was not made prior to death. In eight of these cases the infarction itself was considered the most probable cause of death, in two others pulmonary embolus was considered most likely.

Evaluation of chest pain was difficult in this group due to the severity of the illness and coincident mental changes. Definite coronary type chest pain was present in three of the 10 cases with recent coronary thrombosis and signs of failure increased following this pain in one of them. In the remaining two the course of failure was apparently not influenced. Of the seven with no record of pain, one was obtunded for long periods and three others were quite confused during hospitalization. The remaining four cases did not complain of pain despite adequate mental status until shortly before death.

Correlation with electrocardiogram was impossible due to the fact that in most cases a tracing was not obtained during the last period of life when the infarction occurred. This was understandable as the patient's course was one of increasing failure without the usual symptomatology surrounding infarction. Of three tracings taken in the pertinent period one showed left bundle branch block and another only left ventricular hypertrophy. These were in patients with pain. The remaining record exhibited only old posterior infarction.

C. *Bronchopneumonia*

Significant bronchopneumonia was secondary only to pulmonary embolus as a complicating factor. In six cases this was extensive and confluent, in multiple lobes; in four others extensive in at least one lobe and in three of mild degree, acute and dependent. In one case there was lobar pneumonia and in one pyothorax. In only four of these cases (all bronchopneumonia) was a clinical diagnosis evident.

Just seven of these cases had a chest film during the last 10 days of life; just nine during the terminal admission.

A clinical diagnosis was made in only four although antibiotics were administered in 10. In most instances penicillin and streptomycin, or tetracycline, were used in usual dosage.

The one case of bacterial endocarditis was diagnosed clinically.

D. *Other Complicating Factors*

Analysis of cases for other complicating factors was carried out although limited to great degree by lack of comparable levels of investigation in the individual cases. Laboratory studies other than blood counts were not uniformly obtained. However the following data may be of interest.

Anemia.—In five cases significant anemia was present with hemoglobin below 11 grams. One of these was the case of bacterial endocarditis. In only one, however, was hemoglogin below 10 grams, being 8.6 in the accelerated phase of hypertension.

Hypoproteinemia.—Plasma protein was measured in only 11 cases and in just one instance (chronic glomerulonephritis) was albumin low, being 2.4 and 2.7 grams per cent on two occasions.

Electrolytes.—Electrolyte studies in 16 cases revealed sodium below 130 mEq/1 with normal chloride value in five. Low chloride determination was found alone in one case with a CO_2 of 41 mEq/1. Elevated chloride was present in two patients with normal sodium.

Digitalization.—Digitalis was used in every case. In thirteen cases the digitalis preparations were administered in dosages above usual maintenance levels without affecting the picture of failure. In two cases inadequate digitalis administration seemed probable. In seven cases digitalis intoxication occurred and five of these exhibited bigeminy or trigeminy with nausea, and with vomiting in one. In one of the seven there were frequent ventricular premature contractions and nausea, and another displayed bigeminy correlated with increased dosages of digitalis.

Three of the cases of digitalis intoxication were in the group of 13 to whom the drug was given in increased dosage. A suspicion of digitalis intoxication could be raised in a number of others in this group.

Arrhythmias.—In 33 patients significant arrhythmias occurred. Eighteen of these were auricular fibrillation. In two instances there were nodal rhythms, and in one case ventricular tachycardia. Frequent ventricular premature contractions occurred in 20 cases and frequent auricular premature contractions in four cases. Arrhythmias were present in 12 of the 17 patients with pulmonary embolization and in 21 of the 27 patients without this complication.

IV. Miscellaneous Findings

A. *Fever.*—A temperature above 100 F. recurrently or sustained was considered significant fever and was present in 28 of the cases. Of the 13 patients with bronchopneumonia 10 had fever; however, in two of these it was present only terminally. In five of these cases the temperature was above 101 F. In the cases with pulmonary embolization eight of the 17 showed fever and in three additional cases there was terminal elevation of temperature. In four of the eight cases the temperature was above 101 F. during the course. Four of the 10 patients with recent coronary thrombosis had fever. In those 12 cases considered to have only an "exhausted heart" there was temperature above 101 F. in only one, low grade fever in another and terminal temperature elevation in an additional case (table 3).

TABLE 3

TEMPERATURE AND LEUKOCYTIC CHANGE

Complication	*Number of Cases*	*Significant Alteration* *Temperature*	*WBC*
Pulmonary embolus	17	11	8
Bronchopneumonia	13	10	8
Recent coronary thrombosis (Infarction in 9)	10	4	3
"Exhausted heart"	12	3	1

B. *Leukocytosis.*—White blood count of more than 13,000 or with a shift to the left of more than 10 stab forms was present in a total of 20 cases. This was found in eight of the 13 cases of bronchopneumonia, eight of the 17 cases of pulmonary embolization, three of the 10 with recent coronary thrombosis, and only in one of the 12 with "exhausted" hearts (table 3).

C. *Albuminuria.*—Albuminuria was present to 3 or 4 plus in twelve cases, 1 to 2 plus in 15 cases, 10 exhibited traces of albumin and no albuminuria was recorded in seven.

D. *Azotemia.*—Nonprotein nitrogen was tested in 27 cases. In five it was below 40 milligrams per 100 cc., in 11 cases it was between 40 and 60, in five cases between 60 and 80, in four cases between 80 and 100 and in two cases it was in excess of 100.

E. *Immediate Cause of Death.*—The most frequent immediate cause of death was considered to be pulmonary embolization (table 4). Undoubtedly a certain number of cases died from the effects of congestive failure alone, despite the presence of the complicating factors listed as most important by the pathologist.

TABLE 4

MOST IMPORTANT IMMEDIATE CAUSE OF DEATH

	Number of Cases
Pulmonary embolization	15
Carotid embolization	1
Myocardial infarction	7
Coronary occlusion without infarction	1
Bronchopneumonia	6
Subacute bacterial endocarditis	1
Ball valve thrombus	1
"Exhausted heart"	12
Total	44

It must be admitted that clinically in patients dying of intractable congestive failure it is often a moot question as to what actually precipitated the death of the patient. The pathologist also may find it impossible to state more than the probable immediate cause of death. Apparently repeated embolization occurred in some cases.

DISCUSSION

A search by the clinician for errors in his primary diagnosis in this series would not have been rewarding. Unrecognized primary conditions obviously are encountered but this study would indicate a much greater importance to consideration of complicating factors.

The importance of pulmonary embolization cannot be over-stressed and the present incidence is similar to other series, indicating a high incidence in general hospital autopsies[5] and particularly in patients with cardiac disease.[6] The high incidence of pulmonary embolization in congestive heart failure,[7] presumably related to pulmonary congestion,[8] is confirmed. Pulmonary infarction occurred in 76 per cent of the cases of embolization, a figure in accord with previous studies.[6, 9, 10]

Equally striking is the high incidence of thromboembolic phenomena of all types. On the basis of present information anticoagulation would seem well advised in congestive failure that does not respond rapidly to therapy. Although only seven of 17 cases of embolism had progression of their course associated with probable onset of embolization clinically, the emboli were certainly significant adverse factors in all. The lack of known onset in many should again emphasize the frequently insidious nature of embolization.

The clinical picture surrounding pulmonary embolization has been shown to be quite varied.[8, 13] The triad of tachycardia, digitalis toxicity and mercury fastness as reported by Tench[14] was encountered, but not in greater number in those with pulmonary embolization than in the series as a whole. Twelve of 17 cases of pulmonary embolization demonstrated arrhythmias as compared to 21 of the remaining 27 cases. Only three of the seven cases of unequivocal digitalis toxicity occurred in those with pulmonary embolization demonstrated at postmortem. In almost every case in this series lack of proper mercurial response was noted. This triad does not necessarily indicate embolization in the refractory failure patient; however, the high incidence of arrhythmias and digitalis toxicity in these patients is emphasized.

Recent coronary thrombosis and myocardial infarction were also present in high incidence and were usually insidious in nature. More than two-thirds of the cases had no chest pain recorded. In some this could be attributed to the mental status of the patient but in an equal number the infarct was apparently painless. While a sufficient cause of death, the recent infarctions were not related to the onset of failure which in every instance was of long duration. Their incidence would suggest that long standing intractable failure predisposes to this thrombotic phenomenon as well as others.

Bronchopneumonia and other infections were frequent yet often overlooked clinically. Bedford and Caird have emphasized this in elderly patients with failure.[15] Here again complicating factors sufficient to interfere with resolution of congestive failure were subtle in their manifestations. A high index of suspicion is indicated and a paucity of complaints must not cause the omission of necessary diagnostic and therapeutic measures. In the desperately ill patient with terminal congestive failure, broad antibiotic coverage would seem to be justified, although, in ordinary dosages, there was no evidence of beneficial effect in this series. Perhaps massive dosage would help to overcome the adverse and negating effects of severe pulmonary congestion and hypostatic factors. Anemia and hypoproteinemia were not significant complicating factors in this series. The few electrolyte studies indicated a low sodium to be the most common aberration although never severe. In one case hypochloremic alkalosis was evident.

Study of the manner of digitalis administration has led to the impression that increase of digitalis in the refractory patient who was on acceptable maintenance dosages prior to intractability was unrewarding. In no case was this procedure of benefit and toxicity was frequent. Inadequate digitalization may have been a factor in only two cases.

Fever and leukocytosis were present in a high percentage of patients with bronchopneumonia and with pulmonary embolization but were lacking in the majority with myocardial infarction and with "exhausted" hearts, as previously reported.[7] These findings cannot be dismissed in refractory failure patients as merely an accompaniment of their severe illness; neither can it be assumed that severe failure will prevent these manifestations of disease.

SUMMARY AND CONCLUSIONS

1. A high incidence of thromboembolic phenomena, especially pulmonary embolism and myocardial infarction, and of pulmonary infection is present in refractory heart failure. These account for the great majority of complicating factors usually considered in appraisal of this condition. The primary cardiac disease has usually been evident in these patients.
2. The insidious nature of these conditions necessitates a high index of suspicion. Fever and/or leukocytosis may be helpful in identification.
3. More frequent use of certain laboratory aids such as x-ray and electrocardiography would presumably be helpful in identifying these complications.
4. The prophylactic use of antibiotics and anticoagulants in intractable failure is deemed justified although their efficacy in this specific situation is not proved and should be evaluated in large series.
5. Arrhythmias, digitalis toxicity and mercury fastness are common in intractable failure and do not necessarily indicate pulmonary embolism.

950 Francis Place

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Special Articles

I Have My M.D.—What Now?

RALPH PERRY, M.D., *Kansas City*

MR. CHAIRMAN, members of the faculty and administration of the University, distinguished guests, members of the graduating class in medicine, ladies and gentlemen: It would be exhilarating to feel I had been chosen from all the doctors of Missouri to address you this afternoon simply because all of you—and particularly the young men of the graduating class—wanted to have the advice and counsel I can give. It would be great to think that you were thirsting for the benefit of my years of personal experience in the practice of medicine and in life.

Unhappily, nothing could be further from the facts. The authorities of the medical school did not invite me. They invited the President of the Missouri State Medical Association.

And this, of course, is exactly as it should be. It is at once a compliment to the practicing medical profession in the state and a compliment, too, I think, to this graduating class that you new doctors and the state association should thus, as it were, be formally introduced to each other on this great occasion.

Acting the part, then, as President, I bring you the greetings and the compliments of your older colleagues in medicine throughout Missouri. I bring you, too—each of you—the warm good wish of every Missouri doctor for a career of achievement, effective service and high personal satisfaction. Quite simply, I congratulate you and wish you luck.

That completes all the President of the Missouri State Medical Association has to say. These exercises would be somewhat briefer if I could leave matters at that.

It was, however, the inevitable consequence of inviting the President that you were also going to have to take, along with him, Ralph Perry, M.D., an ordinary physician who has been practicing in Missouri for a good many years now and who just cannot let pass this golden opportunity to express to an alert, if captive, audience a couple of things that have long been on his mind. From here on, then, these are the remarks of Ralph Perry.

I hasten to reassure you that, in saying I have a couple of things I want to talk about today, I mean it quite literally. There are really just two of them. And they will not take me long.

My first topic relates to the personal decision each of you has to make as to the kind of medicine he will practice—the kind of physician he ought to be to make his maximum contribution to society on the one hand, and to achieve the fullest personal satisfaction on the other.

My second topic will be a brief consideration of a side of life I believe is all too often neglected by members of our profession—the side of life that has to do with the general responsibilities of citizenship—in community and civic matters and in politics.

Now as to topic No. 1—what kind of medicine are you individually going to practice? What sort of doctor are you going to be?

I know that each of you has given long hard thought to this fundamental question. I expect that a good many of you have already made at least a preliminary decision in this regard and that your plans for intern and residency training reflect this decision. I hope, however, that my comments may have interest for at least some of you and that they may influence and encourage these to become doctors broadly concerned for the whole patient—family doctors, general practitioners.

I do not want to minimize in the least the important need for able men in academic medicine, in teaching and research. I certainly do not wish to suggest that we do not require men of the most highly developed competence in all the great and growing numbers of specialties and subspecialties that become more and more necessary as our scientific knowledge multiplies. I do not want to be understood as discouraging any man from going into the kind of career or special area of concentration toward which his interests and his aptitudes strongly attract him.

But I do wish to emphasize that there is a real possibility that things are getting out of balance as the present trend to specialization accelerates. We have already some 51 kinds of specialists, subspecialists or sub-sub-specialists. There is, I believe, a demonstrated need for more generalists, for more family doctors, for more physicians concerned with the whole patient.

This need is particularly great in the rural areas of our state. And one of the strong considerations underlying the establishment of this great new four-year medical school was to supply this need—to train more young men from Missouri to prac-

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Presented at the Third Pre-Commencement Exercises held at the University of Missouri School of Medicine, May 28, 1959, Columbia.

tice general medicine in the areas of the state, where the need for their services is greatest.

The people of Missouri have some right to look to members of this class for help in this area of need. They have invested, I am told, over $14 million in the physical plant of the university medical center, and more than $11 million of public funds has gone into the operation of the school of medicine, the school of nursing and the university hospital since 1955.

This money is a rough measure of the value Missourians have placed on the medical education of young men like you. And, as I have said, one of the great elements in the public interest has been, from the start, the provision of an increasing number of doctors to provide badly needed medical service in outstate Missouri.

The thing I would stress today, however, is that there is—along with this very great need—a very great opportunity for new general practitioners in rural areas. The office of the Missouri State Medical Association has been active for years in helping Missouri communities obtain the doctors they need and in helping doctors establish themselves in promising communities. We have plenty of evidence that the need of the rural community—and there are many such communities in Missouri—is the young doctor's opportunity.

I speak of opportunity not merely in terms of money income—though this is an important consideration—and nowhere is it possible to build more rapidly a large and stable practice than in the kind of community I'm talking about. The opportunity here, however, is much more than money—it is to become quickly a necessary and leading figure in the whole community life—it is to become the friend and trusted adviser of people in all walks of life—it is, perhaps most importantly, the opportunity, from the very start of active practice, to have the satisfaction that comes from service that meets an urgent human need—the satisfaction that, in the most direct sense, you are the physician of your people in your community.

That's enough, I think to say on my first topic. If there are among you any great researchers, great teachers, great specialists in the making—you will not, I know, be led astray by what I have said. You will follow your star. For those of you, however, whose general goal it is to be great physicians, in the full and humane sense of the words, general practice in outstate Missouri is at once a great challenge and a great opportunity.

I come now to my second topic. And on it I shall be even more brief. I am concerned here with the role of the physician in society as citizen and plain human being.

There is an occupational hazard in the practice of medicine that, if not guarded against, can do the individual doctor, the profession as a whole and society at large a great deal of harm. It is the temptation for doctors to think of themselves as individuals set apart from the rank and file of humanity, set apart by knowledge, skill and power—and intellectual elite.

It is easy to see how the temptation arises. Patients ask questions. Doctors give the answers. Patients do what we tell them to. Somehow we get to feel that we are entitled to an acquiescent, "Yes, doctor," from the whole human race on any matter whatsoever. We fall, in other words, into what the theologians call the sin of pride. We tend, like the Pharisee, to thank God we are not as other men are.

And, in doing so, we too often hold aloof from the general life of the community, from its economic and social problems, from its cultural and physical development projects and, above all, from its politics.

In this area, I would urge each of you to be on his guard. It's a great and noble thing to be a physician. It is greater and nobler to be a physician citizen—one who shares fully in the problems and the aspirations of the society he lives in.

This counsel will not, I know, apply to the one or two special geniuses who may be in this group—to the rare men of private and unique insight who really are different from other men and whose special contribution will be a star of blinding new truth discovered from the vantage point of an ivory tower.

But, for the rest of you—you ordinary men of flesh and blood who are to practice medicine in the world—I urge you to be a part of the world—to take part fully in its day-to-day concerns, to be men of affairs as well as men of medicine.

And particularly I urge you to be active in your county and your state medical societies whose business it is to be concerned with medicine's role in society. Never has there been a time in which our profession has been more affected by social and political developments. Every year sees new challenges to the traditional relationships between doctor and patient, new proposals for new ways of providing health care, new dangers to the freedom of the profession.

Medicine, in short, is in politics whether we like it or not. Medical organizations—at local, state and national levels—require today the best talents of the best doctors. I hope all of you will make your contribution here as the years go by. Only by doing so can you have an assurance that the years will not bring drastic changes—changes bad and dangerous for you and for your patients.

My wish for you all in summary is simply this: That you will be good doctors, taking good care of people, where you see the need for your contribution is greatest. And, last, but just as important, that you will be good men and good citizens.

4800 E. 24th St.

A.M.A. Annual Session

Atlantic City June 8-12, 1959

Report of the Missouri Delegates to the A.M.A

JOSEPH C. PEDEN, M.D., *St. Louis;* DURWARD G. HALL, M.D.,
Springfield; H. E. PETERSEN, M.D., *St. Joseph,* AND
ROLLA B. WRAY, M.D., *Nevada*

Report of this meeting by Joseph C. Peden, M.D.

ALL OF THE delegates from Missouri attended the sessions of the House of Delegates except Dr. F. L. Feierabend, Kansas City. His alternate, Dr. Rolla B. Wray, Nevada, served in his place. Dr. H. Relton McCarroll, St. Louis, Delegate from the A.M.A. Section on Orthopedics, served as a member of the important special reference committee to consider the Report of the Commission on Medical Care Plans.

Also present from Missouri were Dr. Ralph Perry, Kansas City, President, MSMA; Dr. James R. McVay, Kansas City, former Trustee of A.M.A.; Dr. Alphonse McMahon, St. Louis, member of the A.M.A. Council on Scientific Assembly; Dr. Victor B. Buhler, Kansas City, former President of MSMA, and Dr. James P. Murphy, St. Louis, Chairman of the Committee on AMEF. Missouri was represented by approximately 100 physicians.

Delegates to the Woman's Auxiliary of the A.M.A., including Mrs. Stanley S. Peterson, Springfield, President of the Woman's Auxiliary to MSMA; Mrs. Ralph Perry, Kansas City, and Mrs. Jordan Kelling, Waverly, attended the sessions of the Woman's Auxiliary to the A.M.A.

Dr. James O. Smith, Clinton, Missouri, won the low net at the American Medical Golfing Association's annual tournament. Dr. Smith had a low gross of 80 and his handicap of 16 gave him a 64 and the low net championship.

The report of the A.M.A. Commission on Medical Care Plans, relations between medicine and osteopathy, the report of the Committee on Preparation for General Practice and the issue of compulsory Social Security coverage for self-employed physicians were among the major subjects which brought important policy actions by the House of Delegates at the American Medical Association's 108th Annual meeting held June 8-12 in Atlantic City.

Another highlight of the meeting was the appearance of President Dwight D. Eisenhower who addressed an over-flow audience of more than 5,000 at the Tuesday night inauguration of Dr. Louis M. Orr, Orlando, Florida, as the 113th president of the A.M.A. It marked the first time that a President of the United States has addressed an A.M.A. annual or clinical meeting.

Dr. E. Vincent Askey, Los Angeles, Speaker of the House of Delegates since 1955, was named President-Elect for the coming year. Dr. Askey will succeed Dr. Orr is President at the Association's annual meeting in June, 1960, in Miami Beach.

The 1959 Distinguished Service Award of the American Medical Association was voted to Dr. Michael E. De Bakey, Houston, Texas, chairman of the department of surgery at Baylor University College of Medicine, for his outstanding contributions in the field of cardiovascular surgery. Dr. De Bakey received the award at the Tuesday night inaugural ceremony.

Total registration through Thursday, with half a day of the meeting still remaining, had reached 28,255, including 12,921 physicians.

EISENHOWER ADDRESS

President Eisenhower, speaking at the inaugural ceremony in the ballroom of Convention Hall, warned that inflation posed the greatest danger to the traditional, free enterprise practice of medicine. The cost of inflation, he said, "is not paid in dollars alone but in increasingly stagnated progress, lost opportunities and, eventually, if unchecked, in lost freedoms for the doctor and the patient." Mr. Eisenhower also expressed gratification at learning of A.M.A. leadership in the program to meet the health care needs of the aged.

COMMISSION ON MEDICAL CARE PLANS

The House of Delegates received Part I of the report of the Commission on Medical Care Plans as information only and then acted upon the Commission recommendations item by item. The House adopted 36 of the recommendations without change, but reworded three which relate to miscellaneous and unclassified plans. The changed recommendations now read as follows:

B-4. "In an effort to decrease, or at least to prevent an increase, in the over-all cost of health care, study should be given to the removal of the requirement of hospital admission as the only condition under which payment of certain benefits will be made."

B-6. "Medical care plans should be encouraged to increase their efforts to provide health education and information concerning the coverage of their subscribers."

B-16. "The American Medical Association believes that free choice of physician is the right of every individual and one which he should be free to exercise as he chooses. Each individual should be accorded the privilege to select and change his physician at will or to select his preferred system of medical care and the American Medical Association vigorously supports the right of the individual to choose between these alternatives."

In connection with free choice of physician, the House also requested the Board of Trustees to transmit to all constituent medical associations the "far-reaching significance" of Recommendation A-7, which says:

"'Free choice of physician' is an important factor in the provision of good medical care. In order that the principle of 'free choice of physician' be maintained and be fully implemented, the medical profession should discharge more vigorously its self-imposed responsibility for assuring the competency of physicians' services and their provision at a cost which people can afford."

The House also strongly endorsed Recommendation B-11, which declares that "Those who receive medical care benefits as a result of collective bargaining should have the widest possible choice from among medical care plans for the provision of such care."

Many of the Commission recommendations urged increased activity by state and county medical societies and the American Medical Association in such fields as continuing study and liaison, closer attention to legal and legislative factors, and the development of guides for the relationship between the medical profession and the various types of third parties. To carry out three of the recommendations involving A.M.A. activities, the House also approved a seven-point program which it requested the Board of Trustees to transmit to the Division of Socio-Economic Activities for immediate attention.

MEDICINE AND OSTEOPATHY

In considering a special report of the Judicial Council on the subject of osteopathy, the House adopted the following policy statement regarding interprofessional relations:

"(A) All voluntary professional associations between doctors of medicine and those who practice a system of healing not based on scientific principles are unethical.

"(B) Enactment of medical practice acts requiring all who practice as physicians and surgeons to meet the same qualifications, take the same examinations and graduate from schools approved by the same agency should be encouraged by the constituent associations.

"(C) It shall not be considered contrary to the Principles of Medical Ethics for doctors of medicine to teach students in an osteopathic college which is in the process of being converted into an approved medical school under the supervision of the A.M.A. Council on Medical Education and Hospitals.

"(D) A liaison committee be appointed by the Board of Trustees of the American Medical Association to meet with representatives of the American Osteopathic Association, if mutually agreeable, to consider problems of common concern including interprofessional relationships on a national level."

In another action concerning osteopathy, the House recommended that the American Medical Association representatives on the Joint Commission Accreditation of Hospitals suggest to the Joint Commission that they inspect upon request and consider for accreditation without prejudice those hospitals required by law to admit osteopathic physicians to their staff.

PREPARATION FOR GENERAL PRACTICE

The House approved and commended the final report of the Committee on Preparation for General Practice, which proposes a new two-year internship program for medical school graduates planning to become family physicians. To avoid unnecessary confusion, the House deleted only one sentence which read: "Indeed, the committee believes that the one year internship actually encourages inadequate preparation for general practice." The Committee on Preparation for General Practice included representatives from the A.M.A. Council on Medical Education and Hospitals, the American Academy of General Practice and the Association of American Medical Colleges.

The suggested program would include a basic minimum of 18 months hospital training in the diagnostic, therapeutic, psychiatric, preventive and rehabilitative aspects of medicine and pediatrics in a very broad sense, including care of the newborn. A physician then could elect to spend the remaining six months for additional training in other segments of the program. The committee stated, however, that participants who plan to practice obstetrics would be expected to spend at least four months of the elective period in obstetrical training.

The report declared that "the graduate program of two years in preparation for family practice should be planned and implemented as a unified whole" with a maximum continuity of assignment in specific services. The program also calls for adequate experience in outpatient care and emergency room service.

SOCIAL SECURITY

In considering five resolutions on the subject of compulsory Social Security coverage for self-employed physicians, the House disapproved of four and adopted one reaffirming its opposition to the compulsory inclusion of physicians. In so doing, the delegates expressed concern over the possible effects that a change of policy might have on the Association's entire legislative program, particularly with respect to the Forand Bill.

The House also recognized "the apparent growing demand by physicians for economic security" and requested the Board of Trustees to investigate the possibilities of developing group insurance and retirement plans which could be made available to Association members. It accepted a reference committee suggestion "that the American Medical Association continue and expand its educational program to inform its members of the economic, social and moral advantages of economic security obtained within the framework of our free enterprise system rather than through the mechanisms of governmental Social Security."

MISCELLANEOUS ACTIONS

In dealing with a wide variety of other subjects, the House also: Urged all physicians to participate more fully in community activities and socioeconomic matters in their own communities but agreed that no change should be made at this time in Article II of the Constitution, which states Association objectives;

Approved in principle the aims and objectives of the President's Council on Youth Fitness and the Citizens Advisory Committee on the Fitness of American Youth;

Accepted a Board of Trustees recommendation that the 1962 Annual Meeting be held in Chicago;

Expressed heartfelt thanks to the Committee on Amphetamines and Athletes, which has completed its assignment;

Requested the Board of Trustees to study the problems and possibilities of establishing an A.M.A. sponsored medical scholarship and/or loan program;

Approved the inclusion of *Today's Health* as a benefit of dues-paying membership and urged members to make it available to their patients;

Recommended that state medical societies, where advisable, initiate legislative efforts to eliminate cancer quackery;

Received a progress report indicating "phenomenal progress" in the field of health insurance coverage for the aged since the Minneapolis meeting last December;

Gave a rising vote of thanks to Dr. Joseph D. McCarthy, who finished his term as chairman of the Council on Medical Service;

Reaffirmed its full support of the Educational Council for Foreign Medical Graduates;

Endorsed the purposes outlined in the initial report of the Medical Disciplinary Committee;

Urged every A.M.A. member to give a substantial gift to the medical schools through the American Medical Education Foundation; and

Expressed appreciation for the outstanding disaster medicine program presented by the United States Army Medical Service on June 6, 1959, in Atlantic City.

OPENING SESSION

At the Monday opening session Dr. Gunnar Gundersen, La Crosse, Wis., retiring A.M.A. President, stressed the personal responsibility of every physician to keep abreast of medical advancements and to deliver "1959 medicine." Dr. Orr, then President-elect, called for concerted effort and medical leadership in four areas—the costs of medical care, recruitment of dedicated medical students, basic research and health care of the aged. Dr. Carl V. Moore, Busch professor of medicine at Washington University, St. Louis, was presented with the eighth Goldberger Award in clinical nutrition. Smith, Kline and French Laboratories of Philadelphia received a special A.M.A. award for its sponsorship of color medical television over the last ten years.

INAUGURAL CEREMONY

Dr. Orr, in his Tuesday night inaugural address, affirmed his belief in the basic principles of medicine, democracy and faith under which America's physicians live. He pointed out that freedom must continually be fought for by men and women who are willing to stand up and be counted. Dr. Leonard Larson, Bismarck, N. D., A.M.A. Board Chairman, administered the oath of office to Dr. Orr, and the latter presented the Distinguished Service Award to Dr. De Bakey. The Fort Dix Band Chorus presented the musical program.

ELECTION OF OFFICERS

In addition to Dr. Askey, the new President-elect, the following officers were selected at the Thursday session:

Vice president, Dr. James Stanley Kenney, New York City; Speaker of the House of Delegates, Dr. Norman A. Welch, Boston, and Vice Speaker, Dr. Milford O. Rouse, Dallas, Tex.

Dr. R. B. Robins, Camden, Ark., and Dr. Hugh H. Hussey, Jr., Washington, D. C., were elected for five year terms on the Board of Trustees. Also elected to the Board, for the first time, was Dr. Percy E. Hopkins, Chicago.

Dr. J. M. Hutcheson, Richmond, Va., was reelected to the Judicial Council. Reelected to the Council on Medical Education and Hospitals were Dr. Charles T. Stone, Sr., Galveston, Tex., and Dr. W. Andrew Bunten, Cheyenne, Wyo.

Dr. Willard Wright, Williston, N. D., was elected, and Dr. J. Lafe Ludwig, Los Angeles, was reelected to the Council on Medical Service. Dr. William Hyland, Grand Rapids, Mich., was reelected to the Council on Constitution and Bylaws.

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President's Page

In the final days of the 70th session of the Missouri Legislature, Senate Bill No. 50 was enacted. On June 18, in the presence of officers and staff members of the Missouri State Medical Association and Missouri Osteopathic Association, Governor Blair signed the bill and it will become law on August 29. The long-sought act provides for a single standard of licensure for doctors of medicine and osteopathy in Missouri. It established the State Board of Registration for the Healing Arts, with seven members—five doctors of medicine and two doctors of osteopathy—to license or register all who will practice in the future as physicians and surgeons. The legislation excludes dentists, nurses, optometrists, pharmacists, chiropodists and chiropractors. It provides power of injunction against persons practicing in violation of the act.

Ralph Perry, M.D.

This is the culmination of about seven years of study and work by members and officers of the Association, as well as those of the Missouri Association of Osteopathic Physicians and Surgeons.

While everything that was wished was not obtained in the bill, its enactment is a forward step in the care of the patient, the ultimate goal of the physician. This new law places Missouri as a leader in what appears to be a trend throughout this country. Some change in the attitude of the American Medical Association and changes in the constitution of the osteopathic association point out this trend.

That the membership may be conversant with this bill which will become law this month, the entire bill is published on page . . .

The officers, the Council, the House of Delegates and many members spent much time and effort in effecting this legislation and I congratulate them on the fulfillment of their work.

Ralph Perry

EDITORIALS

Medical Society Meetings

The following editorial appeared in the May 1959 issue of the *Tri State Medical Bulletin* which is published at Joplin. Permission was given by the author who is editor of the publication, S. D. Papp, M.D., Joplin, to reprint the editorial. It follows:

"State medical society meetings and similarly the national medical society meetings are all familiar to all of us because of their scientific sessions which bring us refresher courses to help us review subjects which we may be getting hazy on. In addition, the scientific sessions bring to our attention new developments in all fields. The value of these courses has been so significant to me that I have attempted to attend one to two such meetings every year since graduating from medical school and in all honesty can state that I have never come home without learning something new.

"In all my previous meetings I attended the scientific sessions but did not attend any of the business sessions. At the last Missouri State meeting in Kansas City, and being your editor, I decided to attend the House of Delegates meeting as a guest, just to see what transpired. It was quite a revelation and it is my opinion that all serious thinking members of the profession should take in these parts of the meetings. Gentlemen, it is in these sessions where a mere handful of our colleagues are fighting hard for our lives. It is here where reports and analyses are given regarding all bills that have been introduced into the state and federal legislatures. It is also the place where new resolutions are introduced. These sessions are literally and actually the guardians of our medical practice as we know it today. It is under their guidance that American Medicine is the greatest in the world today and the envy of every other country in the world.

"It is, however, not the intention of this article to stop here with my praise for these men and their untiring efforts in our behalf. It is my desire to impress upon the other members of the component societies that these men need all of our support and need it 1,000 per cent more than we have given to date. If we do not give them more of our help, I fear that we are the last generation of medical practitioners to practice medicine as we do now. The next generation, some of whom will be our children, will be practicing under such handicaps of regimentation, socialization and under 'third party' handicaps, that the quality of medical care cannot do other than deteriorate.

"Gentlemen, 'it is later than you think.' We should all get into the habit of reading the 'Washington News' section of the *A.M.A. Journal* and the corresponding section of our state society journals. We should not only read these, but we should study these reports in detail and act accordingly and let our representatives know our desires. That is a must, not next year nor the year after, but now. Ten years from now will be too late—just ask our 'cousins' across the sea in Britain.

"The next meeting you go to, make it a point to attend the House of Delegates meeting as a guest. These are not closed sessions, and members of the society are welcome. You will all be surprised at the amount of hard work your delegates put in, and the enormous task that faces them. They need every ounce of support we can give them."

Voluntary Health Insurance Continues Growth

Voluntary health insurance coverage is increasing faster among people 65 and over than among any other age group in the country. Forty-three per cent of the population 65 and older now has such insurance—an increase of almost 40 per cent in the last five years.

About seven of every ten families in the United States now have some form of protection under voluntary health insurance, Health Information Foundation reports. The proportion of insured families has increased almost 10 per cent in the last five years.

Seventy-five per cent of the population in the Northwest part of the United States carries insurance against hospital costs, it is reported. Comparable percentages for other sections are 68 for the West, 67 for the North Central and 55 per cent for the South.

From 1953 to 1958, according to Health Information Foundation, the proportion of individuals with insurance protection against hospital costs increased from 57 to 65 per cent of the United States population. During the same time, the proportion of persons with medical-surgical insurance rose even more, from 48 to 61 per cent of the population.

Musings of the Field Secretary

It was an impressive scene. The beautiful air-conditioned, spacious Auditorium of the University of Missouri Medical Center was comfortably filled with the 30 senior medical students, their parents, faculty members and other friends. The occasion was the Precommencement Exercises for these 30 neophyte doctors who were graduating this June. This was a big day for them. They took "The Oath of Hippocrates" as rendered to them by Dr. M. Pinson Neal, Professor Emeritus of Pathology. The introduction of new members of Gamma Chapter of Alpha Omega Alpha Honorary Medical Fraternity was made by Dr. Milton D. Overholser, Counselor of AOA and Professor of Anatomy at the University.

The announcement of various gifts, grants, fellowships and other awards was given by Dr. Frank Engley, Assistant Dean. The departments of Anesthesiology and Surgery presented awards for outstanding work in these departments.

William T. Griffin, Thompson, Mo., was the recipient of the Fred B. Kyger, Jr., Scholarship Award which is awarded annually to the outstanding graduating student in obstetrics and gynecology. The award was personally presented by Dr. Fred B. Kyger, Sr., Kansas City.

The Annual Missouri State Medical Association award to the outstanding graduate of the class went to Monroe B. Painter, New Franklin, Mo., and was presented by Dr. Ralph Perry, President of the Association. This award consists of two items—an honors graduate award certificate and a $100 U. S. Government bond.

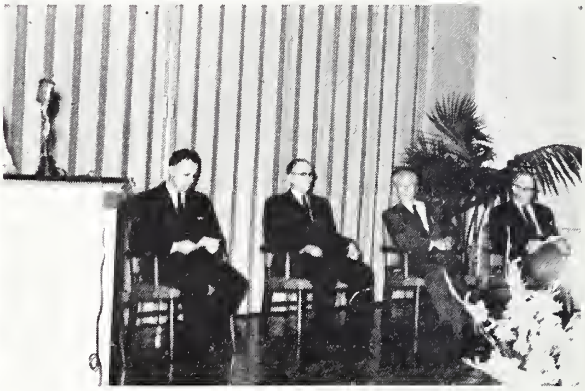
Dr. Perry presented the certificate of award and bond.

A talk entitled, "An Introduction to the University of Missouri School of Medicine Alumni Association and the Medical School Foundation," was ably given by Dr. John McHaney, Jefferson City, President of the Medical Alumni.

The main address for the occasion was given by Dr. Ralph Perry, President of the Missouri State Medical Association. For his remarks he used the title, "I Have My M.D.—Now What?" Two main points were stressed in his talk, namely (1) the privilege of being a doctor and the opportunities pertaining thereto, particularly as family physicians, and (2) the responsibilities of doctors as citizens. The address appears in this issue of Missouri Medicine.

Graduates took the Oath of Hippocrates.

Ten members of this graduating class will serve their internships in Missouri, beginning July 1, at the following hospitals: one at St. Anthony's Hospital, St. Louis; one at Jewish Hospital, St. Louis; four at St. Louis County Hospital; one at City Hospital in St. Louis; one at Menorah Hospital, Kansas City; one at St. Luke's Hospital in Kansas City and one at the University of Missouri Medical Center in Columbia.



Dean Shrout, Drs. Neal, Kyger and McHaney took part in the exercises.

The Missouri State Medical Association presented an honors graduate award and a $100 U. S. Government Savings Bond to the outstanding graduate of the 1958-59 senior medical school class of St. Louis University and Washington University at their respective graduating exercises as well as at the University of Missouri.

News—Personal and Professional

A. Lloyd Stockwell, M.D., Kansas City, was elected president of the visiting attending staff of the Kansas City General Hospital. **Gerald L. Miller,** M.D., was elected president-elect; **Samuel U. Rodgers,** M.D., vice president, and **James W. Fowler,** M.D., secretary-treasurer.

Avery A. Drake, M.D., Rolla, was an honored guest at meetings of the council and grand chapter of York Rite Masonry in St. Louis recently.

The Rotary Club of De Soto honored **C. E. Fallett,** M.D., De Soto, at a meeting this spring for his forty years of service to the community. Also honored for civic service was W. W. Wieman, D.D.S., with whom Dr. Fallett has shared offices during this period.

The *Lebanon Rustic-Republican* carried a story and pictures of **J. W. Lindsay,** M.D., Conway, telling of his 54 years of practice in the community.

Approximately 700 women saw two films on cancer in Neosho, after which **A. E. Upsher,** M.D., Kansas City, and **L. T. Taylor,** M.D., Neosho, answered questions from the audience.

The Missouri Heart Association installed **Roland P. Ladenson,** M.D., Columbia, as president at its 10th annual meeting.

The Cape Girardeau Mental Health Association had as a recent speaker **C. T. Herbert,** M.D., Cape Girardeau.

The St. Joseph Mental Health Association recently heard **Addison M. Duval,** M.D., Jefferson City, discuss the mental health problems of Missouri.

Officers of the medical staff of the Menorah Medical Center, Kansas City, for the 1959-1960 period are **Harold Passman,** M.D., president; **Bela K. Kent,** M.D., president-elect; **David Waxman,** M.D., secretary, and **Alexander Lichtor,** M.D., treasurer.

The Kansas City Heart Association has installed **Charles F. Grabske,** M.D., Independence, as president.

At a "Career Day" held under the direction of the Guidance Department and Education Committee of the Ferguson-Florissant high school at which 41 occupations were represented, **Charles E. Martin,** M.D., Ferguson, represented the medical profession.

The Sertoma Club of Joplin recently had as speaker **L. H. Lewis,** M.D., Joplin, who spoke on phases of cancer.

Appearing on KCMO-TV in a program commemorating the 50th anniversary of St. Mary's Hospital, Kansas City, were **James H. O'Neil,** M.D., **E. R. Trowbridge, Jr.,** M.D., and **Hubert M. Parker,** M.D.

The Rotary Club of Mexico had as speaker at a meeting in May **H. M. Hardwicke,** M.D., Jefferson City.

The Kansas City Academy of General Practice has named **George V. Feist,** M.D., Kansas City, "General Practitioner of the Year."

New president of the Richard Cabot Club Clinic, Kansas City, is **W. R. King,** M.D. Other officers are **D. M. Love,** M.D., vice president, and **E. L. Slentz,** M.D., secretary.

The Missouri Public Health Association awarded the annual W. Scott Johnson Award to **Lynn M. Garner,** M.D., Jefferson City.

The Salisbury Press-Spectator recently carried a story and picture of **G. W. Hawkins,** M.D., recalling the celebration held six years ago when Dr. Hawkins completed his fiftieth year of practice.

The American Leprosy Missions, Inc., a Protestant leprosy relief organization, has elected **Oliver W. Hasselblad,** M.D., Kirksville, as president.

The Central States Society of Industrial Medicine and Surgery has elected **Richard A. Sutter,** M.D., St. Louis, as president. **William Macon,** M.D., St. Louis, was elected to the board of governors.

Harry K. Cohen, M.D., Kansas City, was recently installed as president of the Kansas City Academy of General Practice. **Frank A. O'Connell,** M.D., was elected president-elect; **J. Max Haight,** M.D., secretary, and **Edward A. Samuelson,** M.D., treasurer.

"Tissue Reactions to Nasal Transplants" will be the subject of a presentation by **William B. Barry,** M.D., Kansas City, at the meeting of the American Rhinologic Society to be held in Chicago in October.

More than 50 friends called at the home of **Clara Mutshnick,** M.D., St. Louis, in a surprise visit honoring her for her fifty years of medical practice.

One of the five Missourians named to a committee to select 15 state winners of the National Foundation's 1959 health scholarship is **John I. Matthews,** M.D., Jefferson City.

Florence E. MacInnis, M.D., Kansas City, has been elected medical director of the Heart of America Tuberculosis Association.

An award for outstanding work in advancing knowledge of the iron in the prevention and cure of iron-deficiency anemia, the Goldberger award, was presented to **Carl V. Moore,** M.D., St. Louis, at the opening session of the American Medical Association meeting.

Nevada Business and Professional Women's Clubs viewed two films on cancer and **Rolla B. Wray,** M.D., Nevada, answered questions following the films.

New officers of the Kansas City Surgical Society are **E. A. Wilkinson,** M.D., president, and **Phillip Halperin,** M.D., secretary-treasurer.

"Disk Injuries, Their Diagnosis and Treatment" was the subject of a talk given by **Leon Fox,** M.D., St. Louis, before the staff of the Missouri Delta Community Hospital, Sikeston, on May 20.

"Whiplash Injures" were discussed by **Samuel M. Sarno,** M.D., Sikeston, both before the Missouri Association of Licensed Practical Nurses at a meeting in Sikeston, and before a meeting of the Southern Missouri Association of Claim Attorneys and Adjustors in Sikeston.

St. Mary's Hospital Auxiliary of Jefferson City sponsored a talk on "Hypnosis and Its Application to Medical Practice" by **E. E. Feind,** M.D., Rolla, on June 2.

At a recent meeting in Atlantic City, **M. H. Black,** M.D., Joplin, was elected president of the American Academy of Tuberculosis Physicians.

Recently elected president of the Perryville Lions Club is **James F. Fairchild,** M.D., Perryville.

Recently elected members of the Board of Trustees of Group Hospital Service, St Louis, are **Carl E Lischer,** M.D., St. Louis, and **R. Ned White,** M.D., Springfield. **M. K. Underwood,** M.D., Rolla, was re-elected to the Board.

RESOLUTION HONORS DR. JOLLEY

A resolution of tribute was introduced in the Missouri Legislature on May 26 by Representative Charles H. Pulis, as follows:

Whereas, The House has learned with deep regret of the death of Dr. J. Frank Jolley of Mexico; and

Whereas, Dr. Jolley has been an outstanding physician and surgeon and has dutifully served his many patients with painstaking skill for over forty years, and his services will be greatly missed in the entire community; and

Whereas, Dr. Jolley was a public-spirited man and freely gave of his time and talent for the benefit of his city and county by serving as mayor of the City of Mexico, and as chairman of the Audrain County Democratic Central Committee and also as a member of the State Democratic Committee and as a delegate to the Democratic National Convention in Chicago in 1940, and in all of which capacities he performed valuable service to his city, county and state; now therefore be it

Resolved, That the House in recognition of the influence that Dr. Jolley contributed to his community, does hereby express its sympathy and regrets to the family of Dr. Jolley in their great loss.

Clinical findings in 900 patients show the selective antihypertensive action of Singoserp

IN 735 PATIENTS, BLOOD PRESSURE FELL AN AVERAGE OF 30.7 mm. Hg:

- more than half of these patients suffered from **moderate to severe hypertension**
- more than half of the cases involved hypertension of at least 6 years' standing, with **many histories of up to 20 years' duration**

THE SIDE-EFFECTS PROBLEM WAS MINIMIZED IN MOST PATIENTS:

Chart shows gratifyingly low incidence of side effects in 233 patients given Singoserp with no other antihypertensive medication

Side Effect	Number	Per Cent
Lethargy	7	2.9
Headache	6	2.5
Gastrointestinal upset	3	1.2
Vertigo	2	0.8
Nasal congestion	1	0.4

DOSAGE: Initially, 1 to 2 tablets (1 to 2 mg.) daily.
SUPPLIED: Singoserp *Tablets*, 1 mg. (white, scored); bottles of 100.
Samples available on request. Write to CIBA, Box 277, Summit, N.J.

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NEW DEAN IS APPOINTED

Vernon E. Wilson, M.D., acting dean of the University of Kansas School of Medicine, has been appointed dean of the School of Medicine of the University of Missouri. The appointment was approved June 29 and he will assume his duties on November 1. He will succeed Dr. Gwilym S. Lodwick, who has been acting dean of the School of Medicine since Dr. Roscoe L. Pullen resigned the deanship on March 24.

Vernon E. Wilson, M.D.

Dr. Wilson was born in Plymouth County, Iowa, on February 16, 1915. After graduation from high school, he enrolled in Mount Morris College with the intention of entering the medical profession, but the closing of that college in the spring of 1932, the economic depression and family responsibilities forced him to postpone his plans. Having been employed by a transportation company while in college, he continued in that work with the hope of eventually returning to school.

Upon being discharged from the USNR in 1946, he entered the University of Illinois College of Medicine and the College of Pharmacy and earned three degrees, a B.S. in 1950, an M.S. (in pharmacology) in 1952 and an M.D. also in 1952. Following internship he went to the University of Kansas.

NEW MEMBERS

Becker, Stanley C., M.D., 8110 Roxburgh Drive, St. Louis 24. St. Louis Medical Society.

Blalock, Robert W., M.D., 310 Odell, Marshall. Saline County Medical Society.

Bond, Leslie F., M.D., 5801a Easton Ave., St. Louis 12. St. Louis Medical Society.

Buessler, John A., M.D., University of Missouri Medical Center, Columbia. Boone County Medical Society.

Carney, Roscoe P., M.D., 1515 Lafayette, St. Louis 4. St. Louis Medical Society.

Daugharty, Duane A., M.D., 1129 Dillon Drive, St. Louis 4. St. Louis Medical Society.

DeTar, George F., M.D., 410 Jackson St., Joplin. Jasper County Medical Society.

Engstrom, Denton P., M.D., 1636 S. Glenstone, Springfield. Greene County Medical Society.

Fraser, Sydney A., M.D., 4901 Easton Ave., St. Louis 13. St. Louis Medical Society.

Handler, David, M.D., 7628 Stanford Ave., University City 30. St. Louis Medical Society.

Hash, Emalyn H., M.D., 4620 Nichols Parkway, Kansas City. Jackson County Medical Society.

Holmes, John L., M.D., University of Missouri Medical Center, Columbia. Boone County Medical Society.

Kelly, John B., M.D., 8457 Buckthorn Drive, St. Louis 21. St. Louis Medical Society.

Lourie, Herbert, M.D., 8608 White Ave., St. Louis 17. St. Louis Medical Society.

McCarthy, John M., M.D., 6245 Westminster Place, St. Louis 5. St. Louis Medical Society.

Narahara, Hiromichi T., M.D., 9098 Swan Circle, St. Louis 17. St. Louis Medical Society.

New, Leo T., Jr., M.D., 10311 Monarch Drive, St. Louis 21. St. Louis Medical Society.

Oliver, George A., M.D., 6924 Millbrook Blvd., St. Louis 5. St. Louis Medical Society.

Palcheff, Chris L., M.D., 1630 N. Jefferson, Springfield. Greene County Medical Society.

Parker, Philip J., M.D., 4620 Independence Ave., Kansas City. Jackson County Medical Society.

Peters, Evelyn L., M.D., Menorah Medical Center, Kansas City. Jackson County Medical Society.

Schillie, Gene A., M.D., General Hospital No. 1, Kansas City. Jackson County Medical Society.

Stoneman, William, III, M.D., 5217 Westminster Place, St. Louis 8. St. Louis Medical Society.

Taylor, Eugene D., M.D., 2601 Whittier Ave., St. Louis 13. St. Louis Medical Society.

Taylor, Eugene T., M.D., 3136 Chouteau Ave., St. Louis 3. St. Louis Medical Society.

Werner, Franklin C., M.D., 1906 Erie, North Kansas City. Clay County Medical Society.

Wick, Quintin J., M.D., 1325 S. Grand Blvd., St. Louis 4. St. Louis Medical Society.

Councilor District News

FIRST COUNCILOR DISTRICT

DONALD M. DOWELL, CHILLICOTHE, COUNCILOR

Buchanan County Medical Society

Seventy-five Northwest Missouri and Northeast Kansas doctors and dentists attended the annual joint dinner meeting of the Buchanan County Medical Society and the Northwest Missouri District Dental Society at Hotel Robidoux, St. Joseph, Wednesday evening, May 6. Presiding jointly were the society presidents, Dr. George W. Forman of the Medical Society and Dr. J. George Ratcliff of the Dental Society.

Speaker was Hamilton B. G. Robinson, D.D.S., Dean of the University of Kansas City School of Dentistry, who delivered a paper on "Oral Problems of the Older Patient"

Program for the event was arranged by the program committees of the medical and dental groups. Dr. Paul M. Beck is chairman of the Medical Society committee, serving with Drs. Richard V. Riddell and Henry C. Willumsen.

William B. Rost, M.D., *Secretary*

Grand River Medical Society

The Grand River Medical Society met May 14, at the Strand Hotel, Chillicothe. Including members, Auxiliary members, and guests, about 45 were in attendance. Following dinner the Auxiliary retired to their meeting.

Drs. Berry and Bohnsack.

The scientific program was presented by Dr. Neill G. Berry, surgeon, Kansas City, who discussed "Diseases of the Breast," illustrated by slides. This was an interesting and scientific presentation of an important subject. There were numerous questions and a lively general discussion at the close of the formal talk.

Ray McIntyre, Field Secretary, was present and gave an interesting talk and comments on some bills pending in the Missouri State Legislature. Dr. Donald M. Dowell, Councilor, also made a short talk.

Dinner preceded the meeting.

Dr. C. H. Cullers reported on the Spring Clinical Conference, May 13 and 14, held at the University of Missouri Medical Center. The doctor was favorably impressed with the program.

The minutes of the last meeting were read and approved. There being no further business the society adjourned.

E. A. Duffy, M.D., *Secretary*

Meeting of June 11

The Annual Golf Tournament of the Grand River Medical Society was held at the Chillicothe Country Club on Thursday afternoon, June 11. The "Calloway System of Handicapping" was used.

At this particular annual affair the druggists from the counties composing the medical society were invited as guests of the doctors to join the golf tournament and participate in the evening festivities. In addition, a number of pharmaceutical representatives participated in the day's events.

The ladies were invited to either play golf or bridge. A total of 30 people were in attendance. First prize in the golf tournament was won by Dr. V. D. Vandiver, Chillicothe, and the second prize went to Dr. C. L. Clark, Trenton.

The evening program consisted of an enjoyable social hour, dinner and a short informal program during which time a trophy and appropriate prizes for the afternoon winners were awarded.

E. A. Duffy, M.D., *Secretary*

SECOND COUNCILOR DISTRICT

J. J. WIMP, KIRKSVILLE, COUNCILOR

Marion-Ralls-Shelby County Medical Society

The Marion-Ralls-Shelby County Medical Society held a dinner meeting at the Mark Twain Hotel in Hannibal, on Tuesday night, May 19. The evening festivities were initiated by a social hour followed by dinner and then a most interesting scientific program. The scientific discussion was on the subject, "The Diagnosis and Treatment of Peripheral Arterial Diseases," and was given by Charles J. Galbraith, M.D., Instructor in Surgery and Chief of St. Louis University Surgical Service at Veterans Hospital; and James C. Redington, M.D., St. Louis, Instructor in Internal Medicine, St. Louis University Medical School.

The Missouri Academy of General Practice cosponsored this interesting program with the cardiovascular section of St. Louis University Medical School.

JOHN H. WALTERSCHEID, M.D., *Secretary*

FOURTH COUNCILOR DISTRICT

PAUL R. WHITENER, ST. LOUIS, COUNCILOR

Jefferson County Medical Society

The Jefferson County Medical Society held its regular meeting Tuesday, May 26, at the Jefferson County Memorial Hospital. The meeting was called to order at 8:30 p.m. by President Dr. R. H. Donnell. Others present were: District Councilor, Dr. Paul R. Whitener, Drs. Allbee, Bolgar, Kozal, Rice, McKinstry, Senn, Sexauer and Rutledge.

The scientific program was given by Dr. I. J. Flance, St. Louis, who talked on "Thesaurosis of the Lungs Due to Hair Net Spray." He gave a series of case reports with x-ray slides to illustrate.

The meeting closed with the usual refreshments furnished by the hospital. In this we were joined by Dr. Flance's charming wife.

JOHN F. RUTLEDGE, M.D., *Secretary*

Lincoln-St. Charles County Medical Society

A dinner meeting of the Lincoln-St. Charles County Medical Society was held Tuesday, May 26, at Station Duquette in St. Charles. Following a social hour and dinner, the scientific program of the evening consisted of an excellent film of Upjohn grand rounds entitled, "Three Key Questions in Coronary Diseases."

PAUL ROTHER, M.D., *Secretary*

FIFTH COUNCILOR DISTRICT

BYRON M. STUART, BOONVILLE, COUNCILOR

Audrain, Callaway, Montgomery County Medical Societies

A joint dinner meeting of the Audrain, Callaway, and Montgomery County Medical Societies was held Tuesday night, May 19, at the Country Club in Mexico. Evening festivities began with a social get-together at 7:00 p.m., followed by dinner and then the scientific program.

The speaker for the evening was Stanley F. Hampton, M.D., St. Louis. In addition to his private practice of internal medicine, Dr. Hampton is assistant professor of clinical medicine at Washington University Medical School. His subject for the evening was "Some Practical Points in the Diagnosis and Treatment of Allergic Conditions in General Practice."

His presentation was most interesting and informative. Twenty-five physicians were present to take advantage of an excellent program.

ERNEST S. GANTT, JR., M.D., *Secretary*

SIXTH COUNCILOR DISTRICT

O. B. BARGER, HARRISONVILLE, COUNCILOR

Henry, Johnson, Pettis, Saline County Medical Societies

By invitation of the staff of the 340th Tactical Hospital of the Whiteman Air Force Base at Knob Noster, a joint dinner meeting of the Henry, Johnson, Pettis, Saline and adjacent county medical societies and the doctors' wives was held at the base on Wednesday night, May 20. Invitations were extended to those who wished to play golf in the afternoon preceding the meeting. The evening affair began with a social hour at the Officers Club. Following this pleasant activity an excellent din-

Drs. Stauffacher, White, McBurney and Barger.

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preciated. There was no new business to be conducted. The meeting was adjourned until September, at which time the fall meetings will start on September 8 in Neosho with the Newton County doctors as hosts.

A. J. Graves, M.D., *Secretary*

Ozark Empire Cancer Conference

The Fourth Annual Ozark Empire Cancer Conference was held at the Kentwood Arms Hotel in Springfield on May 27. This annual affair is jointly sponsored by the Missouri Dvision of the Missouri Cancer Society, the Greene County Medical Society and the Missouri Academy of General Practice.

Registration began at 11:00 a.m. with the official activities getting under way at 12:30 p.m. with a "get acquainted luncheon." R. Ned White, M.D., Chairman, Cancer Control Committee, Greene County Medical Society, presided at the luncheon. From 2:00 to 5:00 p.m. an outstanding scientific program was presented by members of the faculty of the School of Medicine of St. Louis University. The moderator of this program was C. Rollins Hanlon, M.D., Professor and Director of the Department of Surgery. The program was as follows:

The Ozarks Cancer Conference was held May 27.

"Cancer of the Skin, Head and Neck," was discussed by F. X. Palletta, M.D., Assistant Clinical Professor of Surgery, and Chief Plastic Surgical Section, and Don C. Weir, M.D., Associate Professor of Radiology; "Tumor Problems in Infants and Children" was discussed by J. Eugene Lewis, Jr., M.D., Associate Professor of Clinical Surgery; Dr. Weir also talked on the subject, "The Problem of Hazardous Radiation to the Diagnostic User of X-Ray." An open panel discussion on "Problems of Diseases of the Breast" with all guest speakers participating concluded this part of the day's activities.

The evening program was ushered in by a social hour followed by the conference dinner with J. G. Siceluff, President of the Greene County Medical Society, presiding.

The evening scientific program consisted of a clinic on tumor problems based on cases submitted by the registrants.

Some 80 physicians from over Southwest Missouri attended the conference and from the many remarks overheard following the day's program, apparently many were impressed with the quality and practicality of the discussions they were privileged to hear.

Drs. Lewis, Weir, White, Hanlon and Paletta.

W. W. Tillman, Jr., M.D., *Councilor*

NINTH COUNCILOR DISTRICT

J. H. SUMMERS, LEBANON, COUNCILOR

Mid-Missouri County Medical Society

A dinner meeting of the Mid-Missouri Medical Society and the doctors' wives was held at the Fox Springs Lodge, Cuba, on Thursday night, May 28. The program for the evening, jointly sponsored by the Missouri Academy of General Practice and St. Louis University Medical School, consisted of a panel discussion on "Recent Developments in the Treatment of Hypertension." The panel was composed of C. G. Vournas, M.D., moderator, George Duane, M.D., and Carlo Caciolo, M.D., all of St. Louis.

A period of two hours was given to this interesting and important subject which witnessed considerable audience participation through the stimulation of this excellent panel.

M. K. Underwood, M.D., *Secretary*

TENTH COUNCILOR DISTRICT

BEN M. BULL, IRONTON, COUNCILOR

Butler-Ripley-Wayne County Medical Society

The May meeting of the Butler-Ripley-Wayne County Medical Society was held at the Hickory House Restaurant, Poplar Bluff, on Tuesday night, May 26. The scientific program of the evening consisted of an Upjohn film of the recent chest disease symposium which was enjoyed by the 15 members present.

Dr. Ernest M. Tapp, new manager of the VA Hospital, was welcomed again into the medical society as a service member.

There was a rather lengthy discussion of the medical society's responsibilities and procedures for community planning in Poplar Bluff. Following this round table discussion a committee was appointed for further investigation and recommendations as to the part the medical society should play in future planning for the community.

Eugene T. Hansbrough, M.D., *Secretary*

Dunklin County Medical Society

A joint dinner meeting of the Dunklin, Pemiscot, Butler-Ripley-Wayne and Semo County Medical Societies was held Wednesday night, June 3, at the Cotton Boll Hotel, Kennett.

The evening program began with social refreshments at 7:00 p.m. consisting of boot heel tea (compliments of the local medical society) followed by a bountiful smorgasbord dinner.

The scientific program for the evening, sponsored by the Missouri Academy of General Practice, presented James A. Kinder, M.D., pediatrician, Cape Girardeau, a member of the Infant and Child Care Committee, MSMA, who spoke on, "Diarrhea in Infants." This is always a problem to physicians who deal with infants. Dr. Kinder gave a well received discussion of this subject.

E. L. Spence, M.D., *Secretary*

Mineral Area County Medical Society

Norman K. Muschany, M.D., St. Louis, spoke at a meeting of the Mineral Area County Medical Society at the State Hospital in Farmington on Thursday night, May 28. His subject was, "The Management of Emergency Obstetrical Problems."

His formal presentation served as a stimulus for a good general discussion of the subject.

George L. Watkins, M.D., *Secretary*

Semo County Medical Society

A dinner meeting of the Semo County Medical Society and the doctors' wives was held at the Country Club in Sikeston on Monday night, May 4. The evening activities began with an enjoyable social hour followed by dinner and then the formal program. At the beginning of this formal program the ladies retired to a separate meeting.

Dr. Ben Bull, Councilor of the district, was invited to discuss some of the matters that came before the House of Delegates at the Annual Meeting of the State Medical Association in Kansas City, April 5-8, 1959. One of these items dealt with the recommendation of the State Association's Laboratory Committee approved by the Council of the Association, which recommended that whenever possible, physicians in private practice should make arrangements with private laboratories for their routine bacteriologic and serologic work, instead of sending such specimens to the State Division of Health laboratories. Some of the society members were not in favor of this recommended action.

Dr. Hardwicke was the speaker.

Dr. H. M. Hardwicke, Director of the Missouri Division of Health, the featured speaker for the evening, explained the entire matter in more detail stating that he had requested the Council of the Missouri State Medical Association to review this problem and make recommendations. He reported that the work load of the public health laboratories in the fields of bacteriologic and serologic work has grown tremendously during the last few years. More than 70 different types of examinations are now performed in the Division of Health laboratories.

SIKESTON
MISSOURI

The meeting was informal.

Appropriations for the operation of the laboratories have not increased proportionally to the increased load. He stated that it has therefore been

(*Continued on page 968*)

The Council

The Council met at Hotel Chase, St. Louis, on June 20, 21, 1959, with J. H. Summers, M.D., Lebanon, Chairman, presiding. Those present were Drs. Summers, Leonard T. Furlow, St. Louis; Paul R. Whitener, St. Louis; B. M. Stuart, Boonville; O. B. Barger, Harrisonville; Kenneth C. Hollweg, Kansas City; W. W. Tillman, Springfield; Ben M. Bull, Ironton; Ralph Perry, Kansas City; R. O. Muether, St. Louis; Charles R. Doyle, St. Louis; H. M. Hardwicke, Jefferson City, and W. F. Francka, Hannibal; Messrs. John Buckner, Springfield; Hollister Smith, Jordan Singleton, Lemoine Skinner, Ray McIntyre, T. R. O'Brien, St. Louis; John W. Noble, Kennett. Drs. Donald M. Dowell, Chillicothe; Joseph C. Peden, St. Louis; H. E. Petersen, St. Joseph; Florence MacInnis, Kansas City; Charles Brasher, Mount Vernon; O. P. Hampton, University City; John I. Matthews, Jefferson City, attended the Sunday session.

MINUTES

Minutes of last meetings of the Council, April 5, 7 and 8, on motion, were approved as published.

INSURANCE

Mr. O'Brien reported that the new hospital and nursing care contract which is to be offered as a supplement to the present group accident and sickness insurance, approved by the Association sometime ago, has been delayed for approval of the insurance commissioner. The carrier, Metropolitan Casualty Company, with other companies, has been merged into a new group of companies called the American Fore Loyalty Group. This organization is now the largest casualty company in the world.

Members will receive shortly an announcement of this merger, and also a statement advising them that their contracts will be assumed by the Commercial Casualty Company. No changes in rates or benefits of the present contracts will be made.

When the insurance Commissioner approves of the new contracts, members will be offered two new contracts at attractive rates. (a) A new hospital-nurse expense contract, with $250 or $500 deductible, and full payment of expenses over the deductible amount for hospital expenses and 75 per cent of nursing expenses, up to a maximum of $10,000 per member. Dependents of members may be added under the same arrangement. In addition, office employees and their dependents may be insured under this program. (b) A new non house confinement contract for sickness and accident insurance providing coverage for 7 years for illness and lifetime for accidents at attractive rates.

REFUND OF DUES

A request from a widow of a member for refund of dues was presented. After discussion, it was voted to refund 50 per cent of the dues when requested up to July 1 of any year. If death occurs after July 1, no refund would be made.

MEDICAL SECRETARIES

A request from the Medical Secretaries and Assistants Association for approval of an advisory committee of physicians, on vote, was approved.

FIELD SECRETARY'S REPORT

Mr. McIntyre reported on hospitals now under construction, locations where bond issues had been defeated, recent additions to hospitals completed and under construction, additions planned soon and new hospitals under constructions. He reported on recent and coming meetings and on placement of physicians. He stated that a total of 21 preceptors would be needed by the University of Missouri Medical School to begin December 1.

SCHOOL HEALTH CONFERENCE

Mr. McIntyre reported that the annual School Health Conference would be held in Highland Park, Illinois, on October 13 and 14, and on motion, it was voted to ask Dr. Eugene J. Schwartz, Springfield, and Dr. Guy N. Magness, University City, to attend the meeting, expenses to be paid by the Association.

LEGISLATION

Mr. O'Brien presented a report on legislation of interest to physicians which was passed in the recent General Assembly and that which was defeated and discussed some of the bills and procedures that had been used. He said the report would be sent to all members of the Association.

S.B. 50 as finally passed was discussed and, on motion, Senator Noble was thanked for his assistance in the passage of the bill.

Mr. O'Brien said that Mr. Proctor Carter had asked advice in appointment of physicians on the advisory committee on the vendor bill.

DIVISION OF HEALTH

Dr. Hardwicke discussed the work of the Division of Health and several problems it is facing, including: activities required by law, assisting private physicians, reduction and redistribution of personnel, the Hill-Burton law, survey of hospital service areas, venereal disease control, premature program, serology, indigency, hospital licensing, including the small hospital, specialized government funds, pilot programs, especially one on psychosomatic patients, and the Ellis Fischel Cancer Hospital. Dr. Hardwicke was asked to give a written memorandum on phases on which he would wish the advice of the Council, which would then be assigned to appropriate committees.

TREASURER'S REPORT

Dr. Doyle reported on the finances of the Association and recommended that $25,000 be transferred to the investment account. On motion, the report and recommendation were approved.

HOSPITAL INVITATION

A letter from the Missouri Hospital Association suggesting a meeting of chiefs of staff and hospital administrators was presented. After discussion in which the "Recommended Guides for Hospital-Medical Staff Relations" worked out by the Joint Conference Commit-

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tee of physicians and hospital representatives was discussed, it was voted that an attempt be made to work out a program for such a meeting and that it not be held until after the next Council meeting in September.

DECEASED MEMBERS

A suggested certificate to be sent to families of members who die was presented by Dr. Whitener and, on vote, was approved.

MEDICAL COUNCIL

Dr. Hollweg reported that a Medical Council of the Metropolitan Kansas City Area had been organized and that it was hoped that it might be of assistance in that area.

COMMITTEE ON TUBERCULOSIS

Dr. MacInnis reported for the Committee on Tuberculosis which made the following recommendations:

I. (a) A continuing tuberculosis case finding program. The primary emphasis in this program shall be "Tuberculin Skin Testing."

(b) The guide for implementing it shall be the material contained in "Informational Material for Group Tuberculin Testing," which was prepared and compiled by the Tuberculosis Committee of the Missouri State Medical Association, the Missouri Division of Health, and the Missouri Tuberculosis Association in 1956 and now being revised. Revisions include the following in the guide material:

1. In the pamphlet titled "A Guide to Group Tuberculin Testing," page 4, line 8, delete "1955 edition of diagnostic standards (pages 42-45)," and insert, "1958 edition of tuberculin testing handbook." A copy of this handbook is included in the guide material.

2. Suggested form letter No. 6, "letter to contacts with negative x-rays," second paragraph, "we advise everyone over 15 years of age to have a chest x-ray each year," probably should be deleted.

II. Members of the committee will be requested by the Chairman to write assigned articles having to do with TB control for publication in various issues of Missouri Medicine, the Journal of the Missouri State Medical Association. Suggested titles for these articles will be submitted to the Chairman by the Missouri Division of Health and the Missouri Tuberculosis Association.

On motion, the report was approved.

TUBERCULOSIS CASE FINDING

Dr. Brasher reported that Newton County, with the approval of the Ozarks Medical Society, would like to promote a tuberculosis case finding survey of school children, this to be done by patch tuberculin testing. The Program would be in cooperation with the American School Health Association. The purpose of this cooperation is to make it possible for schools to be certified as tuberculosis-free in this state. He said that this method was first used in 1941 and now is carried out in nine states.

A subcommittee of the American School Health Association and the local county tuberculosis association would direct the local work and certificates would be given to schools in which certain percentages of the students were tested. He said the program would be expected to grow from the school phase and become county wide. Cooperation with osteopathic physicians in such work was discussed and it was felt that this should be worked out at local levels.

On motion, the Newton County project was approved. Upon request of Dr. Brasher, the school certification method was approved.

On motion, it was also approved that a subcommittee of the Committee on Tuberculosis meet with Dr. Hardwicke and representatives of the Missouri Osteopathic Association and persons interested in tuberculosis work, to develop plans for the new tuberculosis control program.

A.M.A.

Drs. Peden and Petersen reported briefly on actions of the A.M.A. at the Atlantic City session. The resolution presented by Missouri Delegates that tax supported hospitals who had osteopaths on the staff be examined on request and without prejudice by the Commission on Hospital Accreditation was acted on favorably. The other Missouri resolution concerning the examination of civilian Air Force personnel was not adopted as it was pointed out that the only examining being done was that of preemployment.

The following report was adopted regarding *"Osteopathy."*

(A) All voluntary professional associations between doctors of medicine and those who practice a system of healing not based on scientific principles are unethical.

(B) Enactment of medical practice acts requiring all who practice as physicians and surgeons to meet the same qualifications, take the same examinations and graduate from schools approved by the same agency should be encouraged by the constituent associations.

(C) It shall not be considered contrary to the Principles of Medical Ethics for doctors of medicine to teach students in an osteopathic college which is in the process of being converted into an approved medical school under the supervision of the A.M.A. Council on Medical Education and Hospitals.

(D) A liaison committee be appointed by the Board of Trustees of the American Medical Association to meet with representatives of the American Osteopathic Association, if mutually agreeable, to consider problems of common concern including inter-professional relationships on a national level.

The following statements were adopted regarding free choice of physician:

A-7. "Free choice of physician" is an important factor in the provision of good medical care. In order that the principle of "free choice of physician" be maintained and be fully implemented the medical profession should discharge more vigorously its self-imposed responsibility for assuring the competency of physicians' services and their provision at a cost which people can afford.

B-11. Those who receive medical care benefits as a result of collective bargaining should have the widest possible choice from among medical care plans for the provision of such care.

B-16. The A.M.A. believes that free choice of physician is the right of every individual and one which he should be free to exercise as he chooses. Each individual should be accorded the privilege to select and change his physician at will or to select his preferred system of medical care and the A.M.A. vigorously sup-

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It was stated that a complete report will be carried in the August issue of Missouri Medicine.

ANNUAL SESSION

Dr. Matthews reported for the Committee on Scientific and Postgraduate Work which recommended that the session be curtailed to two and a half days and that it begin on Tuesday. After discussion, it was voted that the plan not be accepted and that the Committee be asked to plan the program on the schedule as used in recent years.

A report from the Medical Exhibitors Association on the 1959 Annual Session was presented, showing that the session had been considered good by the majority of exhibitors.

COMMITTEE ON AGING

The following Committee on Aging was announced: Drs. Stanley S. Peterson, Springfield, Chairman; Ralph Perry, Kansas City; Rolla B. Wray, Nevada; Louis H. Kohler, St. Louis; C. Thorpe Ray, Columbia.

COMMITTEE ON REDISTRICTING

The following Committee on Redistricting was announced: Drs. W. F. Francka, Hannibal, Chairman; H. E. Petersen, St. Joseph; Robert B. Bassett, St. Louis; John F. Pearl, St. Clair; J. Loren Washburn, Versailles; Roy Pearse, Nevada; Richard H. Kiene, Kansas City; Kenneth Glover, Mount Vernon; James D. Butts, Rolla; W. D. English, Cardwell.

CORPORATE PRACTICE

The committee and definition of its work in studying the corporate practice of medicine in Missouri was discussed. It was suggested that the committee might limit its study to city and county hospitals in the metropolitan areas to begin with but it was agreed that the committee should determine from the instructions of the House of Delegates how its work should proceed. On motion, it was voted that $5,000 be authorized for the initial implementation of the work of the committee.

INSURANCE

Mr. O'Brien reported that he had sought information on a life insurance plan for members of the Association and so far had a plan from the Financial Planning Company, St. Louis. He gave estimated rates that would apply and said that 22 per cent participation of membership under 70 would be necessary. If that percentage is reached each applicant would be eligible for $10,000 life insurance without physical examination. He said that he would report further as soon as possible.

1962 ANNUAL SESSION

The location, Hotel Chase or the Sheraton-Jefferson, for the 1962 Annual Session was discussed. Mr. O'Brien was asked to obtain data on the difference in cost and report further to the Council.

NEXT MEETING

It was announced that the next Council meeting would be held September 26 and 27, Hotel President, Kansas City.

DEATHS

Buck, Ulysses G., M.D., Rothville, a graduate of Keokuk Medical College, 1896; member of Chariton-Macon-Monroe-Randolph County Medical Society; aged 92; died May 3.

Fuerth, Arthur L., M.D., Cape Girardeau, a graduate of St. Louis University Medical School, 1916; member of Cape Girardeau County Medical Society; aged 65; died May 5,

Pendleton, George F., M.D., Kansas City, a graduate of Western Reserve Medical School, 1914; member of Jackson County Medical Society; aged 74; died May 5.

Cunningham, Eric A., M.D., Louisiana, a graduate of Washington University Medical School, 1926; member of Pike County Medical Society; aged 60; died May 6.

Gunn, Aubrey J., M.D., Versailles, a graduate of Barnes Medical College, 1904; member of Morgan County Medical Society; aged 78; died May 8.

Gradwohl, R. B. H., M.D., St. Louis, a graduate of Washington University Medical School, 1898; member of St. Louis Medical Society; aged 91; died May 9.

Humphrey, Henry M., M.D., Brashear, a graduate of Barnes Medical College, 1899; member of North Central Counties Medical Society; aged 83; died May 11.

Stone, William E., M.D., Boonville, a graduate of Washington University Medical School, 1918; member of Cooper County Medical Society; aged 67; died May 14.

Clay, Calvin, M.D., St. Charles, a graduate of Washington University Medical School, 1922; member of Lincoln-St. Charles County Medical Society; aged 64; died May 15.

Rund, Emmet H., M.D., St. Louis, a graduate of National University Medical School, 1918; member of St. Louis Medical Society; aged 67; died May 19.

Myers, John L., M.D., Des Moines, Washington, a graduate of University of Kansas Medical School, 1904; member of Jackson County Medical Society; aged 87; died May 20.

Jolley, J. Frank, M.D., Mexico, a graduate of Rush Medical College, 1913; member of Audrain County Medical Society; aged 71; died May 31.

Kennedy, Francis L., M.D., St. Louis, a graduate of St. Louis University Medical School, 1930; member of St. Louis Medical Society; aged 55; died June 13.

Odell, Richard T., M.D., St. Louis, a graduate of Washington University Medical School, 1943; member of St. Louis Medical Society; aged 46; died June 21.

Griffith, Harry M., M.D., Columbia, a graduate of University of Kansas Medical School, 1928; member of Boone County Medical Society; aged 60; died June 26.

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References: 1. Menger, H. C.: Clin. Med. 4:313 (March) 1957. 2. Charles, C. M.: Geriatrics 2:110 (March) 1956. 3. Shuster, B. H.: M. Clin. North America 40:1787 (Nov.) 1956. 4. Dolowitz, D. A.: Rocky Mountain M. J. 55:53 (Oct.) 1958.

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From the Medical Schools

WASHINGTON UNIVERSITY

Lectures

Dr. James O. Elam, director of anesthesiology at Roswell Park Memorial Institute, Buffalo, N. Y., lectured at Washington University School of Medicine in May as guest of the division of anesthesiology and of the St. Louis Society of Anesthesiology, discussing the mouth-to-mouth and mouth-to-airway methods of emergency artificial respiration, which have recently been approved by the Army, National Academy of Sciences and the National Research Council as being more effective than the prone pressure, arm lift method. Dr. Elam also spoke to anesthesiology division residents and house staff on the design of anesthetic equipment, and was guest lecturer at the dinner meeting of the St. Louis Society of Anesthesiology. Prior to accepting his present appointment at the Buffalo Hospital, Dr. Elam was assistant professor of anesthesiology at Washington University School of Medicine from 1951 to 1953.

Dr. Jonathan E. Rhoads, professor of surgery and surgical research at the University of Pennsylvania, Philadelphia, delivered the 24th annual Leo Loeb lecture in May. He discussed preventive surgery in the field of cancer and studies on the justification of risk. The lecture is sponsored by Mu Chapter, Phi Beta Pi medical fraternity at Washington University School of Medicine, in honor of Dr. Leo Loeb, professor emeritus of pathology at the Medical School. Dr. Loeb, who is 89, became professor of comparative pathology at Washington University in 1915 and was head of the department of pathology from 1924 until his retirement in 1937. He and his wife live at 40 Crestwood Drive, Clayton. Best known for his work on cancer, Dr. Loeb was the first to demonstrate that susceptibility to cancer frequently is inherited, disproving the then widely-held belief that it was infectious. Another major scientific contribution was his discovery that Graves' disease or exophthalmic goiter can be caused by a pituitary gland hormone which partially controls the thyroid gland. Dr. Rhoads is a medical graduate of Johns Hopkins University and received his D.Sc. degree from the University of Pennsylvania in 1940. He has held his present title with the Pennsylvania Medical School since 1950. He was guest of honor at a dinner in the Phi Beta Pi fraternity house, following the Leo Loeb lecture.

Dr. Elwyn J. Anthony, professor of child psychiatry at Washington University School of Medicine, was banquet speaker at the annual meeting of the Southwest Regional Conference of the Child Welfare League in the Cosmopolitan Hotel, Denver, in June. Association representatives from Arkansas, Colorado, Kansas, Missouri, New Mexico, Oklahoma and Texas attended. Dr. Anthony spoke on the changing trends in child care in America today. Formerly senior lecturer in child psychiatry at the Institute of Psychiatry, University of London, Dr. Anthony assumed his present position with Washington University School of Medicine in September of 1958. He is also head of the William Greenleaf Elliott Division of Child Psychiatry at the Medical School.

C. V. Harrison, professor of morbid anatomy at the Postgraduate Medical School, University of London, will discuss the diagnosis and prognosis of Hodgkin's disease at Washington University School of Medicine. As guest of the department of pathology and the division of surgical pathology, Professor Harrison lectured to sophomore medical students and participated in a surgical pathology staff conference. Prior to arriving in St. Louis, he lectured at Children's Hospital in Montreal, Canada, and attended pathology meetings in Boston. Professor Harrison received his M.B. and B.Ch. degrees, comparable to an M.D. degree in the United States, from University College Hospital, London. He has been on the staff of the Postgraduate Medical School since 1946, and has held his present position since 1955. In 1953, he was co-author of a book, *Recent Advances in Pathology.*

Alumni Day

Alumni of the Washington University School of Medicine heard reports on progress of the Medical School and papers on various aspects of medicine at a clinic program on Friday, June 5. The clinic sessions were followed by the annual banquet, sponsored by the Medical Alumni Association, in the Khorassan Room of the Chase Hotel. The annual business meeting and election of officers of the Medical Alumni Association was conducted at the beginning of the clinic program. Edward W. Dempsey, dean of the School of Medicine, reported on the school's growth and progress and Dr. Frank R. Bradley, director of Barnes and Allied Hospitals, reported on progress of the Medical Center. Dr. Keith Wilson, assistant professor of clinical medicine at the Medical School and president of the Medical Alumni Association, presided at the morning session. The following seminars were held: "Experimental and Clinical Evaluation of Serum Amylase in the Diagnosis of Pancreatitis," with Dr. Harvey Bernard, assistant professor of surgery, as speaker; "Antibiotics and the Biosynthesis of Bacterial Cell Wall," Dr. Jack Strominger, associate professor of pharmacology; "Present Status of Hypoglycemic Agents," Dr. Lillian Recant, associate professor of medicine and of preventive medicine; "Clinical and Experi-

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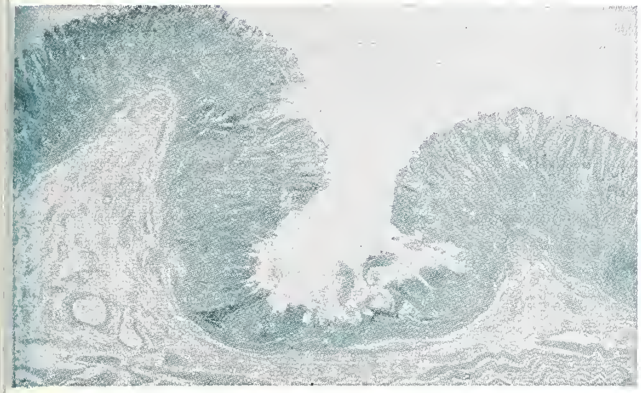

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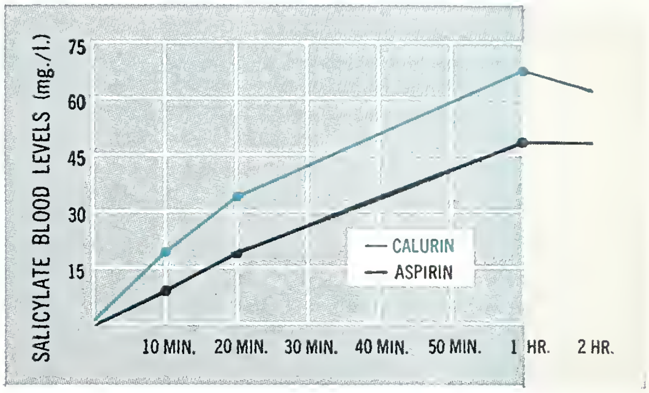

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mental Experiences in Coarctation of the Aorta in Infants," Dr. Thomas B. Ferguson, assistant professor of thoracic surgery, and "Developments in Fibrinolytic Therapy for Thrombo-Embolic Diseases," Dr. Sol Sherry, professor of medicine. A clinical pathologic conference was held with Dr. Robert M. O'Neal, assistant professor of pathology, as moderator. Following a luncheon, the afternoon clinic program was presented, with Dr. Paul O. Hagemann, assistant professor of clinical medicine and chairman of the 25-year reunion class, presiding. Speakers were Dr. Alexis Hartmann, Sr., professor and head of the pediatrics department at the Medical School and chief of staff at St. Louis Children's Hospital, who discussed, "Interesting Clinical Studies of Disturbances of Carbohydrate Metabolism," and Dr. Eugene Bricker, associate professor of clinical surgery, whose subject was "Experiences in Substitution of the Urinary Bladder." A panel discussion on "Hits, Runs and Outs in Diseases of the Gallbladder and Biliary Tract" was held with Dr. C. Alan McAfee, instructor in clinical surgery, serving as moderator. Panelists included: Dr. Michael Karl, assistant professor of clinical medicine; Dr. Heinz Haffner, assistant professor of clinical surgery; Dr. Harvey A. Humphrey, assistant professor of radiology, and Dr. Warren M. Lonergan, instructor in clinical medicine. Guest speakers at the evening banquet were Mr. and Mrs. Vincent Palmer, who described their experiences in deep-sea diving, under-water painting and living with the pirate natives of the South Seas.

Awards

New supplemental and renewal research grants in the amount of $206,276 were awarded Washington University School of Medicine by the U. S. Public Health Service in May. Largest new grant of $62,424 was awarded Dr. John R. Smith, associate professor of medicine, for the training program in medical cardiology. The grant will provide funds to train several post-doctoral candidates in experimental methods for studying the details of heart and blood vessel disease and the diagnosis and treatment of patients with these diseases. Three beginning fellowships will be awarded for a first year; three advanced fellowships for a third additional year of study. A $23,558 new grant to Dr. Leonard J. Tolmach, associate professor of chemistry in radiology, will be used for a study of the effects of x-ray on normal and malignant cells. Dr. John Dee Davidson, instructor in clinical medicine and in preventive medicine, was awarded a $3,561 new grant for research to clarify certain changes in human serum protein levels in various gastrointestinal conditions and in a few unusual types of heart disease. A supplemental grant of $19,747 was awarded Dr. Bernard Becker, professor and head of the department of ophthalmology, for research in that department. Dr. James L. O'Leary, professor of neurology, received $12,031 in supplemental grants for psychiatry and neurology research. A renewal grant of $36,000 was awarded Dr. Oliver H. Lowry, professor and head of the department of pharmacology, for the neuropharmacology training program. Dr. Seymour Reichlin, assistant professor of medicine and of psychiatry, received an $18,831 renewal grant; Dr. William H. Daughaday, associate professor of medicine, $16,124, and Dr. Robert M. Burton, assistant professor of pharmacology, $14,000. Dr. Mildred Cohn, associate professor of biological chemistry at Washington University School of Medicine, received a $10,134 new research grant from the United States Public Health Service in June. Funds will be used to purchase equipment to investigate the detailed molecular structure of adenosine triphosphate by nuclear magnetic resonance spectroscopy. A $20,950 renewal U. S. Public Health Service grant to Dr. Eli Robins, professor of psychiatry, will be used to extend biochemical studies of schizophrenia to include the application of immunochemical methods. If an abnormal protein is found, it will be possible to study the genetics of schizophrenia by measuring the amounts of this or related proteins in the blood of family members of the patients with schizophrenia.

ST. LOUIS UNIVERSITY

Lectures

Dr. Martin Bodian, director of the Department of Morbid Anatomy at the Hospital for Sick Children, London, England, visited the Department of Pathology on June 22 and 23. He was the guest of Dr. Drummond H. Bowden, assistant professor of pathology and director of laboratories at the Cardinal Glennon Memorial Hospital. Dr. Bodian lectured on "Neuroblastoma, With Particular Reference on Vitamin B_{12}, and "Mega-Ureters and Bladder Neck Obstruction."

Dr. Valentin Bonifas, associate professor of microbiology, attended the 400th anniversary of the University of Geneva. Dr. Bonifas, a 1945 alumnus and former faculty member at the University of Geneva, participated in a three-day scientific program sponsored by medical alumni. He took part in a symposium on "The Metabolism of Virus Infected Cells." The latter part of June he attended a session of the Swiss Society of Microbiology, which met in Saint Gallen. Dr. Bonifas formerly headed the Virus Department at the Cantonal Institute of Hygiene in Geneva. He joined the University's medical staff in 1957.

Three members of the department of surgery participated in the Fourth Annual Ozark Empire Cancer Conference at Springfield, May 27. Dr. C. Rollins Hanlon, director of the department, moderated the program. Drs. Francis X. Paletta, assistant professor of clinical surgery, and Don C. Weir, associate professor of clinical radiology, gave a paper on "Recognition and Management of Skin Cancer and Similar Lesions." Dr. Weir also spoke

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dosage: for "round-the-clock" control — 10 mg. to 25 mg., b.i.d.; for "once-a-day" use — 25 mg. once a day, appropriately scheduled, for therapy or prevention. **supply:** Oral Tablets, 10, 25 and 50 mg., press-coated, bottles of 50 and 500; Emulsion (Vesprin Base) — 30 cc. dropper bottles and 120 cc. bottles (10 mg./cc.). **references:** 1. Stone, H.H.: Monographs on Therapy *3*:1 (May) 1958. 2. Reeves, J.E. Postgrad. Med. *24*:687 (Dec.) 1958. 3. Burstein, F.: Clinical Research Notes *2*:3, 1959. 4. Kris, E.: Clinical Research Notes *2*:1, 1959. 'VESPRIN®' is a Squibb Trademark

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on "Radiation Hazards in Medical Practice." Dr. James E. Lewis, associate professor of clinical surgery, spoke on "Tumor Problems in Infants and Children."

Dr. Vallee L. Willman, assistant professor of surgery, spoke before the Peoria County Medical Society on May 19. He addressed the group on "Current Status of Cardiac Surgery."

Dr. Peter G. Danis, professor of clinical pediatrics, and first-chief-of-staff, Cardinal Glennon Memorial Hospital for Children, spoke before the Serra Club's June meeting on developments at Glennon Hospital.

Dr. R. Walter Schlesinger, director of the department of microbiology, moderated a symposium on "The Biology of Cells Modified by Viruses or Antigens" before the Society of American Bacteriologists meeting in St. Louis. Dr. Leonard Laskowski, assistant professor of pathology and consulting clinical microbiologist, St. Mary's Group of Hospitals, served as publicity chairman for the convention.

Summer Research

Three St. Louis University School of Medicine scientists are engaged in summer research investigations on the East Coast.

Dr. R. Walter Schlesinger, director of the department of microbiology, and Dr. Thomas M. Stevens, instructor in microbiology, are at the Mount Desert Island Biological Laboratory at Bar Harbor, Maine.

They are engaged in the biochemical analysis of horshoe crab blood to see if it is suitable as a medium for insect tissue culture. The horshoe crab is one of the oldest species left over from prehistoric times.

Dr. Norman E. Melechen, assistant professor of microbiology, is engaged in research studies at the Long Island Biological Association at Cold Spring Harbor, Long Island. Working with Dr. Melechen is Kenneth Rashid, a sophomore medical student. Their research investigations involve the relationship of virus production of non-virulent bacteriophage to nucleic acid synthesis of the bacterial host in which it is harbored.

Student Awards

Eight St. Louis University School of Medicine seniors received special awards at their annual banquet, which preceded commencement ceremonies held June 6. Dr. Francis J. Carey received a $500 prize and certificate of merit for the most outstanding original research work submitted by a senior medical student. His research study involved the growing of human cancer cells in small chambers inserted under the skin of mice. His paper was entitled, "Studies of the Immunology of Heterologous Tissue Transplants." Dr. Carey worked on the investigation under the direction of Dr. John W. Berry at City Hospital research laboratories.

Dr. Alan Kays was the recipient of an honorary scroll and a $100 bond presented by the Missouri State Medical Association on the basis of scholarship.

Dr. John R. Hogan was the recipient of a gold engraved watch and scroll presented by the Roche Laboratories for scholarship and character, and a certificate naming him to "Who's Who in American Colleges and Universities for 1958-59."

Other recipients of Who's Who certificates were: Drs. John C. Schultz, Jess C. Stone, Martin F. Stein. All of the students received Mosby Book awards for scholarship. Recipients of Merck Manual Awards for scholarship were Drs. Reginald C. S. Ho and James W. Barrow.

Six Grads Sons of St. Louis M.D.'s

Six St. Louis University graduates were able to compare doctor of medicine sheepskins with their fathers' who practice in the St. Louis area. Five of the fathers are also University graduates.

Like-father-like-son combinations included: Dr. James H. Jones, who is the son of Dr. Vincent L. Jones, a 1914 alumnus; Dr. Vincent J. LoPiccolo, son of Dr. V. J. LoPiccolo, a 1930 alumnus; Dr. Harold J. Ott, II, son of Dr. Harold J. Ott, a 1925 alumnus; Dr. Daniel J. Martin, son of the late Dr. Thomas M. Martin, a 1926 alumnus; Dr. Robert P. Kloecker, son of Dr. H. J. Kloecker, and Dr. Daniel F. O'Sullivan, son of Dr. G. A. O'Sullivan, a 1927 alumnus. Three of the fathers are currently serving on the University's medical faculty. They are Dr. Jones, associate professor of clinical ophthalmology; Dr. LoPiccolo, assistant professor of clinical medicine, and Dr. Ott, senior instructor in surgery.

Grant Award

A grant renewal of $16,942 has been awarded the School of Medicine by the United States Public Health Service for continuation of studies in pulmonary diseases. Investigators in the project are Dr. Herbert C. Sweet, associate professor of internal medicine and director of the Miller Pulmonary Laboratories, and Dr. John P. Wyatt, professor of pathology and associate director of the department.

In their research investigations, Drs. Sweet and Wyatt are correlating the clinical patterns of emphysema and industrial lung diseases with the pathologic changes in the lung as determined by radiographic and injection methods. Dr. Peter W. Kinsella, instructor in internal medicine and research assistant in the pulmonary laboratories also is associated in the project.

A grant renewal of $12,236 from the United States Public Health Service has been awarded the School of Medicine for research studies in experimental pathology. Dr. John P. Wyatt and Dr.

For arthritic M.S.: full corticosteroid benefits from new Gammacorten T.M.

Patient M.S., 81, at the time of the first visit was in severe pain and very uncomfortable. Complained of swelling of wrists, legs and various joints; pain and stiffness in cervical area and lower spine; pain, swelling and limited motion in the fingers; slight ulnar deviation of the hand. M.S. demonstrates position necessary to put on his hat (motion was so restricted that he could not comb his hair).

Treatment and Result: After 36 hours of GAMMACORTEN therapy, M.S. had "complete relief." Joint swelling had decreased, pain was almost absent, range of motion had increased dramatically. At the end of the first week of GAMMACORTEN he was free of discomfort and able to return to his job as a porter. M.S. could put on his hat normally, could comb hair; joint function near-normal after first week.

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SUPPLIED: GAMMACORTEN Tablets, 0.75 mg. (pink, scored).

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Joseph P. Wack, senior instructor in pathology, are continuing investigations on the metabolism of iron in experimental animals by using radioactive compounds. The researchers "tag" different iron compounds and administer them orally and intravenously as a method for following the pathways utilized by the iron in the body. They use geiger counters in their investigations.

UNIVERSITY OF MISSOURI

Meetings

A state pediatric meeting sponsored by the American Academy of Pediatrics was held at the Medical Center Auditorium on April 25. Members of the faculty who presented papers were Dr. Paul Zee, research assistant in pediatrics, on "Glucose Tolerance Test as an Index of Diabetes Mellitus in Children"; Dr. Gerard Van Leeuwen, assistant instructor in pediatrics, presented "Nephrotic Syndrome in Early Infancy," and Dr. Fikri Hanna, instructor in pediatrics, presented "Stevens Johnson Syndrome." Dr. Helen Yeager, instructor in pediatrics, presided at the afternoon session of the meeting. Others appearing on the program were: Dr. James Williams, Dr. L. E. Wall and Dr. J. Eugene Lewis, all from St. Louis University; Dr. Alexis Hartmann, Dr. Don Thurston and Dr. P. White, all from St. Louis Children's Hospital. Dr. Stanley Harrison, Clayton, presided at the morning session. Dr. H. M. Hardwicke, Deputy Director of the Division of Health of Missouri, guest speaker, spoke on "In What Way May Tax Money Be Used Within the Practice of Medicine?"

The Medical History Group met on Thursday, May 14, at the University of Missouri Medical Center. Guest Speaker was Father Lowrie Daly, S.J., Ph.D., of St Louis University, who spoke to the group on "Manuscripts in the Knights of Columbus Vatican Film Library."

The Fourth Annual Spring Clinical Conference was held at the Medical Center on May 13 and 14, sponsored by the Missouri Heart Association, Missouri Academy of General Practice and the University of Missouri School of Medicine. The following faculty members participated: On Wednesday, May 13, Dr. Gwilym S. Lodwick, professor and Chairman of Radiology and Acting Dean of the School of Medicine, extended the welcome. Dr. C. Thorpe Ray, professor and Chairman of the Department of Medicine, spoke on "Diuretic Therapy"; Dr. Thomas W. Burns, associate professor of medicine, and Dr. Robert L. Jackson, professor and Chairman of the Department of Pediatrics, participated in a panel discussion on "Current Concepts of Diabetic Therapy" for which Dr. Jackson served as moderator. During the afternoon session on Wednesday, Dr. Jacob S. Roden, associate professor and Chairman of the Department of Obstetrics and Gynecology, presided, and Dr. Kenneth Keown, professor of anesthesiology, served as moderator of a panel discussion on "Cardiac Surgery," with the following panel members: Dr. Theodore E. Keats, associate professor of radiology; Dr. Jack M. Martt, assistant professor of medicine, and Dr. Hugh E. Stephenson, Jr., professor and Chairman of the Department of Surgery. On Thursday, May 14, the morning session began with a demonstration and panel discussion on "The Cardiac Surgery Program, University of Missouri Medical Center," with Dr. William H. Wade, assistant professor of surgery, acting as moderator, and Dr. Owen A. Kearns, associate professor of preventive medicine, and Dr. Vincent P. Perna, assistant professor of pathology, serving as members of the panel. Moderator for the panel discussion on "The Management of Peptic Ulcer" was Dr. Gwilym S. Lodwick, and serving as panel members for this discussion were Dr. Robert H. Barnes, clinical associate in psychiatry, and Dr. J. Ned Smith, assistant professor of medicine. Dr. C. S. Anast, assistant professor of pediatrics, served as moderator for the noon panel of experts. Presiding at the afternoon session was Dr. Kearns during which time Dr. Perna served as moderator for a panel discussion on "Parasitology," the panel consisting of Dr. Clement E. Brooke, assistant professor of pediatrics, and Dr. Michael H. Ivey, assistant professor of microbiology.

Trips and Talks

On April 22, Dr. M. D. Overholser, professor and Chairman of the Department of Anatomy, attended a meeting of the Board of Directors of the Georgia Brown Blosser Home for Crippled Children in Marshall.

Dr. E. W. Lowrance, professor of anatomy, attended a meeting sponsored by the Kansas Academy of Science at Lawrence, Kansas, on April 30 and May 1, at which a joint paper by Dr. Lowrance and Dr. H. B. Latimer, professor of anatomy at the University of Kansas, was presented on "Relative Weights and Lengths of the Bones in Human Skeletons From Asia."

Dr. Kenneth Fitch, assistant professor of anatomy, has received a fellowship from the National Institutes of Health for the purpose of attending the postgraduate course in Histochemistry offered by the Department of Postgraduate Medicine of the University of Kansas. Dr. Fitch attended the second half of the course, June 15-20, devoted to histochemical staining technics.

MEND (Medical Education for National Defense) was the sponsoring group for a symposium on "Nutrition Under Wartime or Disaster Conditions" held on April 30 and May 1 in Denver, and attended by Dr. T. D. Luckey, professor and Chairman of the Department of Biochemistry. Dr. Luckey spent Saturday, May 2, visiting the Air Force Academy at Colorado Springs.

Dr. Engley attended the Missouri Public Health

Association Meetings in St. Louis May 18-20 and presented a paper at the Laboratory Section on "The Persistence and Resistance of Staphylococci."

Dr. M. Pinson Neal, professor emeritus of pathology, served as inspector for the American Medical Association and the American Society of Clinical Pathologists to survey Medical Technology Programs of Barnes Hospital and Washington University in St. Louis on May 13.

Dr. Vincent P. Perna, assistant professor of pathology, on May 12, attended a discussion of recent advances in laboratory medicine sponsored by the Franklin County Medical Society in Washington, Missouri.

The following members of the Department of Pediatrics attended a research meeting sponsored by the American Pediatric Society and the Society Pediatric Research held in Buck Hill Falls, Pennsylvania, from May 5 through 9: Dr. Robert Jackson, professor and Chairman, of the Department of Pediatrics, Dr. Walter Hepner, professor of pediatrics, Dr. C. S. Anast and Dr. Clement E. Brooke, assistant professors of pediatrics, and Mary Bowen, instructor in Pediatrics.

On May 5, Dr. James E. Randall, associate professor of physiology and biophysics, discussed his research in biophysics at a meeting of Psi Chi, national honorary society in Psychology.

The following members of the Department of Radiology were recently elected to the Missouri Chapter of Sigma Xi: Dr. Gwilym S. Lodwick, professor and Chairman of the Department of Radiology, Dr. T. E. Keats, associate professor, and Mr. George Koenig, instructor in radiologic technology.

On April 25-26, Dr. Keats presented a paper entitled "The Relative Diagnostic Effectiveness of Cine and Serial Angiocardiography" at the meeting of the Association of University Radiologists at Emory University in Altanta, Georgia. Dr. Keats lectured on "New Diagnostic Procedures—Laboratory and Radiological" on May 12, at a meeting in Washington, Missouri, of the Tri-County Academy of General Practice.

On April 20, Dr. Hugh E. Stephenson, Jr., professor and Chairman of the Department of Surgery, spoke at the Medical Center to a group from the School of Nursing on "The Function of the Physician on the Health Team." Dr. Stephenson attended an ad hoc committee meeting of the American Medical Association in Chicago on April 30 and May 1 to study operating room deaths.

Dr. Samuel P. W. Black, professor of neurosurgery, presented a paper at a meeting of the Harvey Cushing Society in New Orleans, entitled "Observation on the Functional Relationship Between the Orifice and Chamber of Experimental Aneurysms."

Dr. John Buesseler, associate professor of ophthalmology, attended a meeting of the American Association for Research in Ophthalmology held in Denver, April 13 through 23, and presented the following papers, which were published in the research supplement of the *American Journal of Ophthalmology,* June issue: "Low Temperature Crystallography of Bovine Vitreous," "Flat Preparation of Rat Retina Stained With PAS" and "Iriodopathy and Retinopathy Produced by Deoxycorticosterone Acetate in the Rat."

Dr. W. H. Wade, assistant professor of surgery, visited Washington, D. C. and Bethesda, Maryland, May 2 through May 4 to study television installations at National Institutes of Health, Navy Medical Center and Walter Reed Hospital.

Dr. Herbert S. Goldberg, associate professor of microbiology, and Dr. J. T. Logue, clincial associate in the Department of Medicine, visited Northern California during the early part of June in coordination with a field study on hypersensitivity hazards of streptomycin used as plant disease control agent for the National Institute of Health Research Project.

Dr. D. G. Hall, assistant professor of obstetrics and gynecology, attended a meeting in Kansas City on May 8, of the Kansas City Gynecological Society.

At the meeting of the Leukemia Guild on June 10, Dr. Joseph Flynn, professor and Chairman of the Department of Pathology, was elected a member of the Board of Directors of the Guild. On June 7, Dr. Flynn and Dr. Vincent E. Perna, assistant professor of pathology, conducted a workshop on "Diagnostic Parasitology" at the Medical Center. The workshop was sponsored by the Missouri Society of Pathologists, the Missouri Society of Medical Technologists and the University of Missouri.

Dr. Robert L. Jackson, professor and Chairman of the Department of Pediatrics, attended a series of conferences in Atlantic City, New Jersey, on June 10, 11 and 12, which were sponsored by the American Medical Association. On June 10, Dr. Jackson participated in the Food Nutrition Council. During the conference on Internal Medicine, he presented a paper and discussion for Dr. Thomas W. Burns, associate professor of medicine, on "Abnormal Stature in Adolescent and Young Adult." During the Diet Conference, Dr. Jackson participated in the discussion of "Diet in Pediatric Care" and also discussed "Early Treatment of Childhood Diabetes" and "Diet Nutrition, Management of Diabetes in Children" during the Diabetes Conferences held on June 11 and 12. Dr. Ray Hepner, professor of pediatrics, also attended the various conferences held in Atlantic City, and participated in the discussion on "The Natal Period Fetal Aspect."

Dr. James E. Randall, associate professor of physiology and biophysics, attended a meeting of the Educational Affairs Committee of the Biophysical Society at the University of Chicago on May 30.

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Dr. Rodman Kabrick, clinical psychologist at the Medical Center, attended a meeting on June 4 of the Missouri Mental Health Authority held in Jefferson City.

Dr. Hugh E. Stephenson, Jr., professor and Chairman of the Department of Surgery, and Dr. William Wade, assistant professor of surgery, attended the Annual Residents Conference at the New York University Postgraduate School May 19 through 23. Dr. Stephenson attended the Silver Anniversary Meeting of the American College of Chest Physicians and the Society for Vascular Surgery held in Atlantic City, New Jersey, June 5 through June 7 during which time he was made a member of the Society for Vascular Surgery.

Dr. John A. Buesseler, associate professor of ophthalmology, spent two weeks, May 29 through June 12, in Washington, D. C., conferring with Dr. J. H. King, Jr., of Washington Hospital Eye Research Center and with Dr. Leyet and Dr. Rapatz at American Foundation for Biological Research regarding preservation process and banking.

Dr. John H. Landor, instructor in surgery, attended a series of meetings at Chicago University School of Medicine May 27 through May 29.

Dr. Kenneth K. Keown, professor of anesthesiology, attended the 8th Annual Convention of the American College of Cardiology held in Philadelphia on May 28. Dr. Keown participated in a symposium on "Management of Complications Attendant to Cardiac Surgery" during the convention. Dr. Keown also attended a meeting in Atlantic City on June 6, sponsored by the American College of Anesthesiologists. Dr. Keown acted as a member of the Board of Governors and Examiner for applicants to the American College of Anesthesiologists. While in Atlantic City, Dr. Keown served as assistant secretary to the executive committee of the Scientific Assembly, Section on Anesthesiology, sponsored by the American Medical Association.

Gifts and Grants

A special grant in the amount of $750 has been made available for a graduate or undergraduate student training to teach orthopedically handicapped children, particularly those interested in the cerebral palsy field by Aleppo Grotto.

The Fidelity Educational Foundation has recently made available a scholarship to be awarded annually to a student enrolled in the School of Medicine who has shown unusual interest and ability in the area of metabolic disease.

Dr. C. Thorpe Ray, professor and Chairman of the Department of Medicine, has been awarded a $17,700 grant by the Department of Health, Education and Welfare for his graduate training program in cardiovascular disease research.

Dr. William Wade, assistant professor of surgery, has been awarded a grant of $8,800 by the American Heart Association for work in the use of dextran sulfate as an anticoagulant for open-heart surgery.

Dr. Michael H. Ivey, assistant professor of microbiology, has been awarded a grant by the committee on research of the Council on Drugs of the American Medical Association for his comparative studies on development of drug resistance by several strains of Trichomonas vaginalis.

Dr. Robert L. Jackson, professor and Chairman of the Department of Pediatrics, has been informed of the receipt of the supplementary amount of $15,000 per year for a 3-year period to his postgraduate training grant in diabetes and metabolic diseases supported by the Public Health Service, National Institutes of Health, Division of Arthritis and Metabolic Diseases.

Dr. James Randall, associate professor of physiology and biophysics, will be the donor of an award, The Biophysics Award, to be presented annually to an outstanding student in Biophysics. Royalties obtained from Dr. Randall's book "Elements of Biophysics" will be placed in a fund which will be used for the award.

Missouri Medicine in Review

Leo H. Pollock, M.D.

FORTY YEARS AGO

The election of Dr. William C. Braisted, Surgeon-General of the Medical Department of the Navy, as President of the American Medical Association was particularly appropriate.

Leo H. Pollock, M.D.

War on typhus with a view to preventing the spread of the dread malady from Poland, where 100,000 persons are down with the disease, to other countries of eastern and southeastern Europe is planned by the League of Red Cross Societies of the World. Six American women fought typhus to a standstill in the remote little town of Palanka, Serbia. Here, one of the foulest pestholes in Northern Serbia, was cleaned up literally and figuratively by American women. One of the nurses fell ill of typhus in her brave fight against the disease.

Dr. M. F. Engman of St. Louis was elected president of the American Dermatological Association at the Atlantic City session, June 16 to 18.

The Wyandotte County Medical Society in Kansas, just across the Missouri line, has inaugurated a crusade against unlicensed practitioners of medicine, quacks, and fakers.

A donation of $2,500 annually for a period of three years has been given to Dr. M. F. Engman of St. Louis to be used in research work on a dermatological subject. The donor of the fund desires to remain anonymous. A grant of $8,200 per year for two years has been appropriated to Dr. M. F. Engman of St. Louis by the United States interdepartmental Social Hygiene Board for research work in syphilis problems. The investigations will be conducted at the Washington University.

On account of the number of infants and young children with chest diseases being brought to the regular tuberculosis clinic of the St. Louis Tuberculosis Society, the society has set aside the hours of 10 to 12 on Tuesday and Friday for the treatment of children.

TWENTY-FIVE YEARS AGO

Dr. Edwin Lee Miller, Kansas City, was chosen President-Elect of the Missouri State Medical Association by the House of Delegates at the St. Joseph Session, May 7 to 10. Dr. Miller will serve as President-Elect during 1934-35 and as President in 1935-1936. Nominated for Vice-Presidents: Dr. D. S. Conley, Columbia; Dr. F. G. Mays, Washington, and Dr. U. J. Busiek, Springfield. For delegates to the American Medical Association: Delegate, Dr. W. H. Breuer, St. James; alternate, Dr. E. H. Skinner, Kansas City; delegate, Dr. A. R. McComas, Sturgeon; alternate, Dr. H. L. Kerr, Crane; delegate, Dr. W. M. West, Monett; alternate, Dr. A. H. Marshall, Charleston. For Councilors: 1st District, O. C. Gebhart, Oregon; 3rd District, J. C. Crockett, Stanberry; 5th District, J. R. Bridges, Kahoka; 7th District, Walter P. Pipkin, Monroe City; 9th District, A. R. McComas, Sturgeon; 11th District, J. H. Timberman, Chillicothe; 13th District, A. J. Welch, Kansas City; 15th District, L. J. Schofield, Warrensburg; 17th District, Guy Titsworth, Sedalia; 19th District, J. S. Summers, Jefferson City; 20th District, C. H. Neilson, St. Louis; 21st District, J. W. Jarvis, Festus; 23rd District, J. B. Luten, Caruthersville; 25th District, P. S. Tate, Farmington; 27th District, J. C. B. Davis, Willow Springs; 29th District, R. M. James, Joplin; 31st District, H. A. Lowe, Springfield.

The Secretary, Dr. E. J. Goodwin, reports that The Journal did not pay for itself during 1933. The Journal contained 516 pages of reading matter and 330 pages of advertising, the latter earning $6,310.07. To this amount must be added $33.98 for subscriptions and $16.75 for bad debts recovered making a total of $6,360.80 actually earned by The Journal. The total cost of printing The Journal including the cost of illustrations, postage, commissions on advertising, discounts to advertisers and bad debts was $6,831.64 showing an excess of expenditure over income of $470.84.

The Executive Committee has held two meetings since the last Annual Session. At the meeting in St. Louis on August 31, 1933, the General Committee on Arrangements was appointed with Dr. W. T. Elam, St. Joseph, as chairman; Dr. Spence Redman, Platte City, and Dr. A. J. Welch, Kansas City. The Secretary reported that the lease on our office in the Missouri Building would expire on January 31, 1934, when he hoped and expected the building would make a material reduction in the rental which now is $140. We may say here that this expectation was realized on February 1, 1934. when the rental was reduced to $100 for the next twelve months and $115 for the next succeeding twelve months, making $107.50 per month for the two years. With the income from our subtenant, the Medical Protective Company, of $45 per month our net rental for 1934-35 will be $62.50 per month. With the change in Treasurers which occurred at the 1933 Session when Dr. R. A. Woolsey, St. Louis, was elected to succeed Dr. George W. Hawkins, Salisbury, the funds of the Association were transferred from the bank at Salisbury to the Mercantile Bank and Trust Company, St. Louis.

TEN YEARS AGO

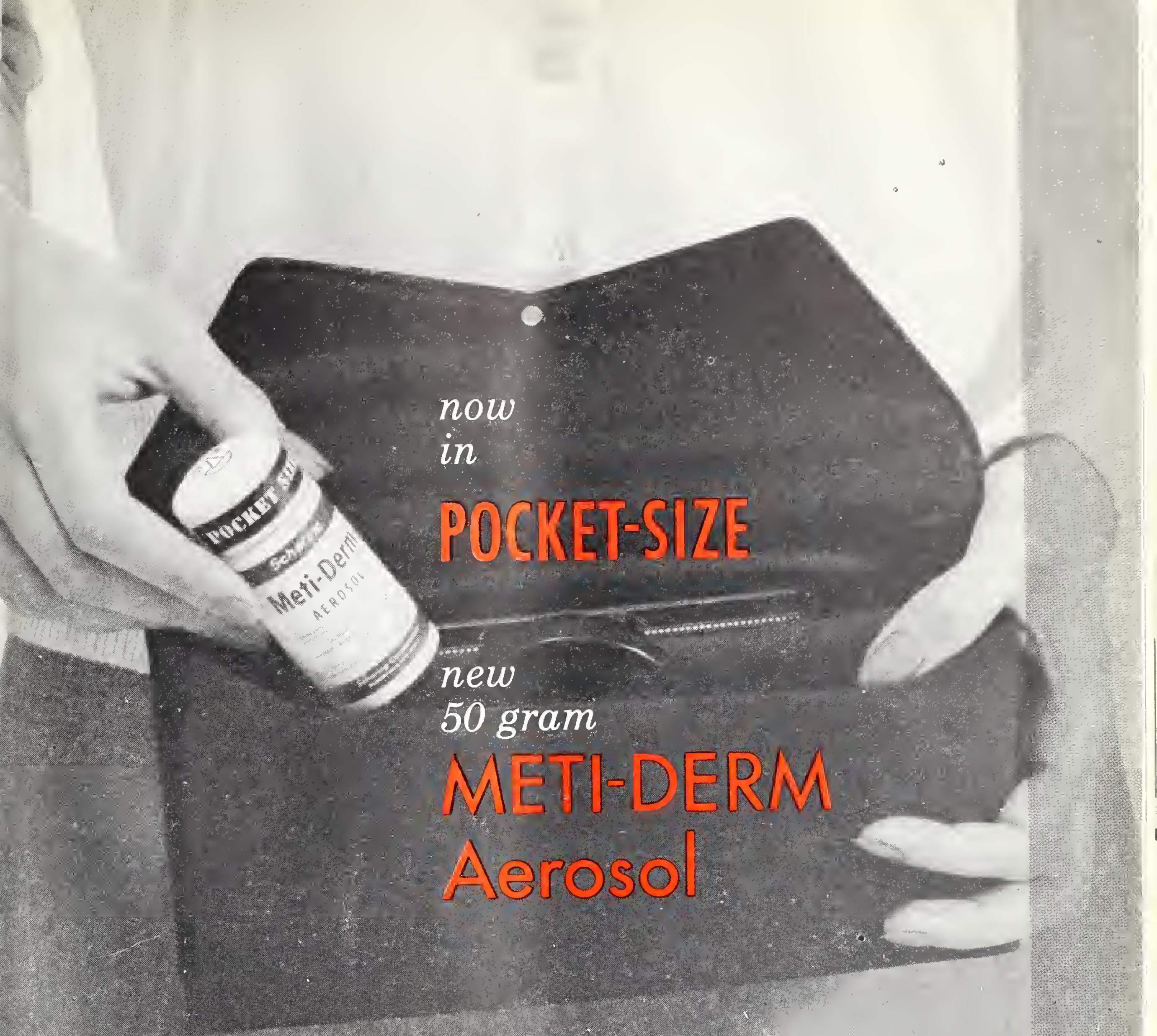
More than 15,000 physicians from all over the world attended the 98th Annual Session of the American Medical Association in Atlantic City, June 6 through June 10. The outstanding scientific attraction was the color television of surgical and medical procedures. The Distinguished Service Medal, awarded annually by the Association for meritorious service in the science and art of medicine, was presented to Seale Harris, M.D., Birmingham, Alabama, Professor Emeritus of Medicine at the University of Alabama. Officers elected are: President-Elect, Elmer L. Henderson, M.D., Louisville, Kentucky; Vice President, James Francis Norton, M.D., Jersey City; Secretary, George F. Lull, M.D., Chicago; Treasurer, Josiah J. Moore, M.D., Chicago, Speaker of the House of Delegates, Frank F. Borzell, M.D., Philadelphia.

Frank M. Grogan, M.D., St. Louis was appointed superintendent of the St. Louis City Hospital. Dr. Grogan will hold this position in addition to being Hospital Commissioner of St. Louis.

J. Earl Smith, M.D., St. Louis, was installed as president of the Missouri Public Health Association at a meeting in Jefferson City on May 6.

A three-day reunion of Base Hospital 21 of World War I and the 21st General Hospital of World War II was held in St. Louis, May 20, 21 and 22, in observance of the thirty-second anniversary of the departure of Base Hospital 21.

G. D. McCall, M.D., Fulton, was honored on the occasion of the laying of the cornerstone of a new infirmary building of the Missouri School for the Deaf. Dr. McCall was school physician from 1896 to 1945.



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150 Gm. container—50 mg. prednisolone.

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METI-DERM with Neomycin Aerosol—
50 Gm. container—16.6 prednisolone and 16.6 mg. neomycin sulfate.
150 Gm. container—50 mg. prednisolone and 50 mg. neomycin sulfate.

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Senate Bill No. 50

(Continued from page 888)

City, Missouri, where the records and register of the board shall be maintained.

4. The President and Secretary shall have power to administer oaths and to subpoena witnesses to require attendance and testimony and to require production of documents and records; and to that end the board may invoke the aid of the circuit court of any county of the state having jurisdiction over the witness, and any failure to obey the order of the court may be punished by the court as a contempt thereof.

Section 3. 1. Except as provided in paragraph 1 of Section 22 of this act, all persons desiring to practice as physicians and surgeons in this state shall appear before the board at such time and place as the board may direct and be examined as to their fitness to engage in such practice. All persons applying for examination shall make application in writing to the board at least thirty days before the date set for examination upon blanks furnished by the board.

2. The examination of candidates for licenses to practice as physicians and surgeons shall be in two parts or sections, and shall be known as Part I and Part II. Part I of the examination may be given at the completion of two years of the professional education required by this section, or may be taken in conjunction with the examination required under Part II. Part I shall be given by the board and shall be taken and passed by all applicants, and the examination given at any particular time shall be the same for all candidates and the same subjects shall be included and the same questions shall be asked. The board shall not be permitted to favor any particular school or system of healing. Part I of the examination shall embrace, in relation to the entire human body, the subjects of anatomy, histology, pathology, physiology, bacteriology or microbiology, biochemistry, physical diagnosis, sanitation and hygiene. No candidate shall be held to have passed Part I of the examination unless he has made an average grade of 75 per cent or more on the several subjects embraced therein with no grade lower than 60 per cent on any one subject.

3. Part II of the examination shall be given by the board and shall be taken by each candidate and successfully passed with an average grade of 75 per cent or more on the several subjects embraced in the examination with no grade lower than 60 per cent on any one subject. After the effective date of this act, except as specifically provided for licensing applicants from other states or under paragraph 7 of this section, and except for persons now holding certificates of licensure under Chapters 334 and 337, RSMo 1949, no license of any kind may be issued to any person by the board until he has successfully passed Part I and Part II of the examination.

4. For candidates applying for certificates of licensure to practice as physicians and surgeons, Part II of the examination shall embrace the subjects taught in reputable professional colleges, sufficiently strict to test the qualifications of the candidates as practitioners.

5. Examinations shall be written, and the examination papers shall be preserved by the board subject to public inspection for a period of three years, after which they may be destroyed. Examinations on each subject shall consist of not less than five questions, each question to have equal weight and equal grade value.

6. Candidates for licenses as physicians and surgeons shall be citizens of the United States and shall furnish satisfactory evidence of their good moral character, and their preliminary qualifications, to-wit: a certificate of graduation from an accredited high school or its equivalent, and satisfactory evidence of completion of preprofessional education consisting of a minimum of sixty semester hours of college credits in acceptable subjects leading towards the degree of Bachelor of Arts or Bachelor of Science from an accredited college or university. They shall also furnish satisfactory evidence of having attended throughout at least four terms of thiry-two weeks of actual instructions in each term and of having received a diploma from some reputable medical college or osteopathic college that enforces requirements of four terms of thirty-two weeks for actual instruction in each term, including, in addition to class work, such experience in operative and hospital work during the last two years of instruction as is required by the American Medical Association and the American Osteopathic Association before the college is approved and accredited as reputable. Any medical college approved and accredited as reputable by the American Medical Association and any osteopathic college approved and accredited as reputable by the American Osteopathic Association is deemed to have complied with the requirements of this paragraph.

7. In determining the qualifications necessary for licensure as a qualified physician and surgeon the board may at its discretion accept the certificate of the National Board of Medical Examiners of the United States, chartered under the laws of the District of Columbia, of the National Board of Examiners for Osteopathic Physicians and Surgeons chartered under the laws of the State of Indiana, in lieu of and as equivalent to its own professional examination. Every applicant for a license on the basis of such certificate, upon making application showing necessary qualifications as above set out, shall be required to pay the same fee required of applicants to take the examination before the board.

8. On the licenses issued by the board, the board shall enter after the name of the licensee the degree to which the licensee is entitled by reason of

That wonderful moment when "you're on your own". . .

"*Good for you!*"

GOOD GOING! Now you've "got the hang of it". . . now you know how to water-ski. And later on, it's really great to relax with a good glass of cold beer. No other beverage hits the spot like beer—nothing is so rewarding. And a glass of beer really picks you up too.

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his diploma of graduation from a professional school approved and accredited as reputable by the American Medical Association and approved or accredited as reputable by the American Osteopathic Association.

Section 4. Upon the applicant paying a fee of $100, the board may, under regulations prescribed by it, admit without examination legally qualified persons who have met the educational requirements of this state, and who hold certificates of licensure in any state or territory of the United States or the District of Columbia authorizing them to practice in the same manner and to the same extent as physicians and surgeons are authorized to practice by this act. Within the limits of this paragraph, the board is authorized and empowered to negotiate reciprocal compacts with licensing boards of other states for admission of licensed practitioners from Missouri in other states.

Section 5. 1. There is hereby established in the office of the State Treasurer a fund to be known as the "Board of Registration for the Healing Arts Fund." All fees of any kind and character authorized to be charged by the board shall be paid to the Director of Revenue and shall be deposited by the State Treasurer into this fund, to be disbursed only in payment of expenses of maintaining the board and for the enforcement of the provisions of this act; and no other money shall be paid out of the State Treasury for carrying out the provisions of this act. Warrants shall be issued on the State Treasurer for payment out of said fund on the certification of the president and secretary of the board.

2. The board shall charge each person applying to and appearing before it for examination for certificate of licensure to practice as physician and surgeon, a fee of Twenty-five Dollars, $12.50 of which is for taking Part I of the examination and $12.50 of which is for taking Part II of the examination. Should the examination prove unsatisfactory and the board refuse to issue a license thereon, the applicant failing to pass the examination may return to any meeting within twelve months after the first examination and be examined without extra charge; but no temporary license may be issued to such persons.

Section 6. 1. Every person holding a license from the board shall have it recorded in the office of the county clerk of the county in which he maintains an office and the record shall be endorsed thereon. The clerk is authorized to charge a fee of $1.00 for recording the license, to be paid by the person offering it for record. Any person removing to another county to practice shall have his license recorded in the county to which he removes, and the holder of the license shall pay the clerk of said county the usual fee for making the record. The county clerk shall keep, in a book provided for that purpose, a complete list of the licenses recorded by him, with the date of issue.

2. Any person neglecting to record his license before entering upon the practice shall be guilty of a misdemeanor, and, on conviction thereof, shall be fined not less than $50.00, and on failure to record said license for thirty days after such conviction he shall be liable to a fine of not less than $100.00.

Section 7. 1. Upon due application therefor and upon submission by such person of evidence satisfactory to the board that he is licensed to practice in this state, and upon the payment of fees required to be paid by this act, the board shall issue to him a certificate of registration under the seal of the board, which shall recite that he is duly registered for the year specified. The certificate of registration shall contain the name of the person to whom it is issued and his office address and residence address, the date and number of the license to practice, and such other information as the board deems advisable.

2. Every person shall, upon receiving such certificate, cause it to be conspicuously displayed at all times in every office maintained by him in the state. If he maintains more than one office in this state, the board shall without additional fee issue to him duplicate certificates of registration for each office so maintained. If any registrant shall change the location of his office during the year for which any certificate of registration has been issued, he shall, within fifteen days thereafter, notify the board of such change and it shall issue to him without additional fee a new registration certificate showing the new location.

Section 8. 1. Every person licensed under the provisions of this act shall on or before the thirtieth day of June following the date on which this act becomes effective, and on or before the thirtieth day of June of each year thereafter, apply to the board for a certificate of registration for the ensuing year. The application shall be made on a form furnished by the board, and shall state the applicant's full name and his office and residence addresses and the date and number of his license, and such other facts as tend to identify him and his license, as the board may deem necessary. If the first registration called for by this paragraph, occurs during an even numbered year, the certificate to be issued shall be for a one year period, and credit shall be given for any fees paid under any prior law for a certificate of registration for the same period.

2. The board shall on or before the 1st day of June of each year mail to each person licensed in this state at his last known office or residence address, a blank form for application for registration. The failure to mail the form of application or the failure to receive it does not, however, relieve any person of the duty to register and pay the fee required by this act nor exempt him from the penalties provided by this act for failure to register.

Section 9. Each applicant for registration under

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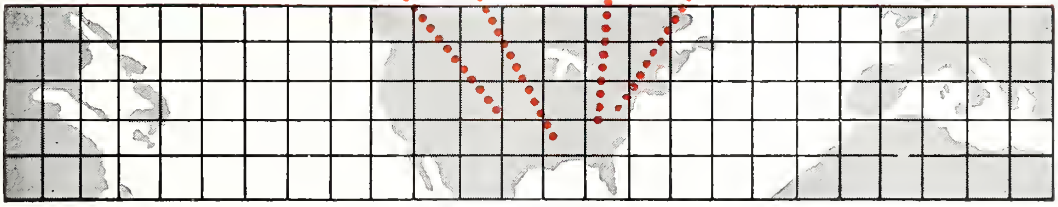

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For adult tension and anxiety	25 mg. tablets Syrup	one tablet q.i.d. one tbsp. q.i.d.
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For adult psychiatric and emotional emergencies	Parenteral Solution	25-50 mg. (1-2 cc.) intramuscularly, 3-4 times daily, at 4-hour intervals. Dosage for children under 12 not established.

Supplied: Tablets, bottles of 100. Syrup, pint bottles. Parenteral Solution, 10 cc. multiple-dose vials.

References: 1. Smigel, J. O., et al.: J. Am. Ger. Soc., in press. 2. Freedman, A. M.: Pediat. Clin. North America **5**:573 (Aug.) 1958. 3. Ayd, F. J., Jr.: New York J. Med. **57**:1742 (May 15) 1957. 4. Menger, H. C.: New York J. Med. **58**:1684 (May 15) 1958. 5. Coirault, M., et al.: Presse méd. **64**:2239 (Dec. 26) 1956. 6. Bayart, J.: Presented at the International Congress of Pediatrics, Copenhagen, Denmark, July 22-27, 1956.

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Science for the World's Well-Being

this act shall accompany the application for registration with a registration fee in the sum of $2.50 to be paid to the director of revenue for the year for which registration is sought. If the application is filed and the fee paid after July first of the year in which registration is sought, the amount of such fee shall be the sum of $2.50, plus an additional 50 cents for each month or part thereof from July first of such year to the date when the application is filed and fee paid; but whenever in the opinion of the board the applicant's failure to register is caused by extenuating circumstances including illness of the applicant, the additional fee of 50 cents may be waived by the board. Whenever any new license is granted to any person under the provisions of this act, the board shall, upon application therefor, issue to such licensee a certificate of registration covering a period from the date of the issuance of the license to June 30th next following the date of issuance of the license without the payment of any registration fee.

Section 10. 1. The board may refuse to license individuals of bad moral character, or persons guilty of unprofessional or dishonorable conduct; and it may, on its own information or on complaint of any person, revoke or suspend licenses, or other rights to practice, however derived, for like causes as hereinafter provided. Without limiting the foregoing general language, the following specifications shall be deemed unprofessional and dishonorable conduct within the meaning of this section:

(a) Knowingly making or presenting, or causing to be made or presented, any false, fradulent or forged statement, certificate, diploma, or other thing in connection with an application for license or registration certificate;

(b) Practicing, or aiding or abetting in the practice of fraud, forgery, deception, collusion or conspiracy in connection with an examination for license;

(c) Committing an unlawful abortion;

(d) Conviction of a felony involving moral turpitude;

(e) Addiction to a drug habit;

(f) Chronic or persistent alcoholism;

(g) Engaging in dishonorable, unethical or unprofessional conduct of a character likely to deceive, defraud or harm the public;

(h) Knowingly making, or causing to be made, or aiding, or abetting in the making of, a false statement in any birth, death or other certificate or document executed in connection with the practice of his profession;

(i) Soliciting patronage in person or by agents or representatives, or by any other means or manner, under his own name or under the name of another person or concern, actual or pretended;

(j) Using, or permitting the use of, his name under the designation of "Doctor," "Dr.," "M.D." or "D.O.," or any similar designation with reference to the commercial exploitation of any goods, wares or merchandise;

(k) Developing such physical or mental disability, or other condition, that continued practice is dangerous to patients or to the public.

2. At least twenty days prior to the date set for any hearing before the board for the revocation or suspension of license, the secretary shall cause written notice to be served personally upon the accused wherever he may be found in the state, in the manner prescribed for the serving of original writs in civil actions. If the accused cannot be found in this state, the board shall cause the notice to be published for a period of not less than twenty days in a newspaper of general circulation in the county in which the accused maintained his last known residence in this state, the last publication to be not less than twenty nor more than thirty days prior to the date set for hearing. The notice shall contain an exact statement of the charges and the date and place set for the hearing before the board. If the party thus notified fails to appear, either in person or by counsel, the board shall proceed with the hearing. The board may receive and consider depositions and oral statements, and shall cause stenographic reports of the oral testimony to be taken and transcribed, which, together with all other papers pertaining thereto, shall be preserved for two years. If a majority of the board is satisfied that the licentiate is guilty of any of the offenses charged, the license shall be revoked or suspended for such period of time as may be determined. Before a license is revoked, there shall be included in the majority of the board voting for the revocation, the vote of at least one board member, if any, who is a graduate of a professional school approved and accredited as reputable by the Association which has approved and accredited as reputable the professional school from which the licentiate himself graduated.

3. Any person whose license is revoked or suspended by the board shall have the right to have the proceedings reviewed as provided by law for the review of decisions, rules and regulations of administrative officers and bodies existing under the constitution and laws of this state.

Section 11. Any person licensed to practice as physician and surgeon in this state who has retired or who may hereafter retire from such practice shall not be required to register as required by this act, if he files with the board an affidavit, on a form to be furnished by the board, which states the date on which he retired from such practice and such other facts as tend to verify the retirement as the board may deem necessary; but if he thereafter re-engages in the practice, he shall register with the board as provided by this act.

Section 12. Whenever in this act any duty or service is required to be performed by any county clerk, the duty or service in the City of St. Louis shall be performed by the health commissioner, as if he was specially named to perform these duties and services, and he shall receive the same compensation therefor as this act provides shall be paid to the county clerk; and whenever in this act the word county is used it shall include the City of St. Louis the same as if said city is specially named.

Section 13. It is not intended by Sections 1 to 12 and 18 to prohibit isolated or occasional gratuitous service to and treatment of the afflicted, and Sections 1 to 12 and 18 shall not apply to physicians and surgeons commissioned as officers of the Armed Forces of the United States or of the Public Health Services of the United States while in the performance of their official duties, nor to any licensed practitioner of medicine and surgery in a border state attending the sick in this state, if he does not maintain an office or appointed place to meet patients or receive calls within the limits of this state, and if he complies with the statutes of Missouri and the rules and regulations of the department of public health and welfare relating to the reports of births, deaths and contagious diseases; and Sections 1 to 12 and 18 shall not apply to Christian Science practitioners who endeavor to cure or prevent disease or suffering exclusively by spiritual means or prayer, so long as quarantine regulations relating to contagious diseases are not infringed upon; but no provision of this section shall be construed or held in any way to interfere with the enforcement of the rules and regulations adopted and approved by the division of health of the state department of public health and welfare or any municipality under the laws of this state for the control of communicable or contagious diseases.

Section 14. Except as provided in the last sentence of paragraph 6 of Section 3 of this act, the question as to whether any school is one entitled to recognition by the board as a reputable professional school of good standing, and the action of the board in refusing to permit an applicant to take an examination, is declared to be a question of fact, and any person aggrieved by the action of the board has the right to have the question reviewed as provided by law for the review of the decisions, rules and regulations of administrative officers or bodies existing under the constitution or by law.

Section 15. Any officer, agent or employee of any professional school or college, whether organized as a corporation, association, partnership, common law trust, or individually owned and operated, who knowingly permits the issuance of any diploma or any certificate of graduation from any such school or college as aforesaid to anyone or anyone who knowingly accepts or receives such certificate or diploma, unless the recipient or beneficiary thereof has actually attended in good faith at least 80 per cent of the minimum curriculum prescribed in this act for such character of schools in this or some other state, and has received instruction in and has satisfactorily passed all the courses and subjects purporting to be required by said school for completion of its course and has actually been granted a degree by vote of the trustees of said college or school, shall be guilty of a misdemeanor.

Section 16. This act does not apply to dentists licensed and lawfully practicing their profession within the provisions of Chapter 332; to nurses licensed and lawfully practicing their profession within the provisions of Chapter 335; to Optometrists licensed and lawfully practicing their profession within the provisions of Chapter 336; to pharmacists licensed and lawfully practicing their profession within the provisions of Chapter 338; to chiropodists licensed and lawfully practicing their profession within the provisions of Chapter 330; or to chiropractors licensed and lawfully practicing their profession within the provisions of Chapter 331, RSMo 1949.

Section 17. It is unlawful for any person licensed as a midwife only to engage in any other branch of medical practice or to advertise herself as doctor, doctress or physician or to use any letters before or after her name on a sign or otherwise, indicating that she is authorized to or does engage in any other branch of medical practice.

Section 18. It shall be unlawful for any person not now a registered physician within the meaning of the law to practice medicine or surgery in any of its departments, or to profess to cure and attempt to treat the sick and others afflicted with bodily or mental infirmities, or engage in the practice of midwifery in this state, except as herein provided.

Section 19. 1. Any person who violates Section 18 of this act shall, upon conviction, be adjudged guilty of a misdemeanor for each and every offense; and treating each patient is considered a separate offense.

2. Any person filing or attempting to file as his own a license of another or forged affidavit of identification, shall be guilty of a felony and upon conviction thereof shall be subjected to such fine and imprisonment as is provided by the statutes of this state for the crime of forgery in the second degree.

3. Upon receiving information that any provision of Sections 17, 18 and 19 of this act has been or is being violated, the secretary of the board or other person designated by the board shall investigate, and upon probable cause appearing, the secretary shall, under the direction of the board, file a complaint with the prosecuting or circuit attorney of the county or city where the alleged offense occurred.

Section 20. If it appears upon complaint to the board by any person, or it is known to the board that any person is violating any of the provisions of this Act, the board, by its own proper counsel, or the prosecuting attorney of the proper county, or the Attorney General may investigate and may, in addition to any other remedies, bring action in the name of and on behalf of the State of Missouri at the relation of the board against any such person to enjoin him from such violation. The action may be commenced in the county in which the defendant resides or in the county in which the defendant engages in or attempts to engage in the matters complained of. The pleadings, practice and procedure in such action shall be in accordance with the law of this state governing injunctions generally, except that the injunction may be issued without proof of actual damage sustained by any person or proof that any person will sustain damage if the injunction is not granted.

Section 21. A licensee under this act shall, in any letter, business card, advertisement, prescription blank, sign, or public listing or display of any nature whatsoever, designate the degree to which he is entitled by reason of his diploma of graduation from a professional school approved and accredited as reputable by the American Medical Association or approved and accredited as reputable by the American Osteopathic Association.

Section 22. 1. On the effective date of this act all persons licensed under the provisions of Chapter 334 as practitioners of medicine and surgery and all persons licensed under the provisions of Chapter 337 as osteopathic physicians shall be deemed to be licensed as physicians and surgeons under this act and subject to all the provisions of this act.

1a. Any person who has attended any certified college of physicians and surgeons, organized and existing within the state of Missouri for four years, and who has received a graduating diploma therefrom, who has been engaged as an intern or a resident physician in any hospital within the State of Missouri for at least one year, who has been actively engaged in the practice of medicine for at least thirty-two years in the State of Missouri, and in the locality in which he resides for at least twenty years next before the passage of this act, who has never been convicted of a crime, and who bears an excellent reputation as a conscientious and ethical practitioner of medicine, shall be admitted without examination to practice medicine in the State of Missouri. Any person admitted to practice medicine under this sub-section shall pay a fee of $100.00.

2. On the effective date of this Act all persons licensed under the provisions of Chapter 334 as midwives shall be deemed to be licensed as midwives under this act and subject to all of the provisions of this act.

3. On the effective date of this act all funds in the state treasury deposited to the credit of the state board of medical examiners fund as provided by Chapter 334, and all funds in the state treasury deposited to the credit of the board of osteopathy fund as provided by Chapter 337, shall be transferred to and deposited into a new fund designated as the "Board of Registration for the Healing Arts Fund," and to the extent that the various funds so transferred may be adequate all appropriations heretofore made against the funds mentioned herein shall be valid and shall be deemed to have been made against the board of registration for the healing arts fund.

4. Where other statutes of this state use the terms physician, surgeon, practitioner of medicine, practitioner of osteopathy, Board of Medical Examiners, or Board of Osteopathic Registration and Examination or similar terms, they shall be construed to mean physicians and surgeons licensed under this act or the State Board of Registration for the Healing Arts in the State of Missouri.

Councilor District News

(Continued from page 937)

necessary for the Division of Health to neglect some purely public health laboratory procedures in order to continue to render laboratory services as requested by practicing physicians.

In addition to this particular problem, Dr. Hardwicke reviewed other activities of the Division of Health such as tuberculosis control, immunization procedures, and the problem of aging, all of which call for the full cooperation of practicing physicians and public health departments.

A general discussion was also held upon various organizational relationships between county medical societies and the State Association. Taking part in this discussion were Dr. Bull and Mr. Ray McIntyre, Field Secretary of the State Association, along with various members of the society. It is felt that this was a worthwhile discussion and served to clear up a number of points which have been questioned in the minds of members of our society.

Thelma Buckthorpe, M.D., *Secretary*

BOOKS RECEIVED

Dietary Prevention and Treatment of Heart Disease, by John W. Gofman, Ph.D., M.D., Donner Laboratory, University of California, Berkeley; Alex V. Nichols, Ph.D., Donner Laboratory, University of California, Berkeley; and E. Virginia Dobbin, Senior Dietitian, E. V. Cowell Memorial Hospital, University of California, Berkeley. G. P. Putnam's Sons, New York. 1958. Price $3.95.

Principles of General Surgical Management, by H. A. F. Dudley, F.R.C.S.E., Lecturer in Surgery, University of Edinburgh; with the assistance of B. C. Paton, M.R.C.P.E., The Royal Infirmary of Edinburgh; I. F. MacLaren, F.R.C.S.E., The Royal Hospital for Sick Children, Edinburgh; I. B. Tait, F.R.C.S.E., St. Mary's Hospital, London; G. F. Murnaghan, F.R.C.S., F.R.C.S.E., The Western General Hospital, Edinburgh; with a foreword by John Bruce, C.B.E., T.D., F.R.C.S.E., Regius Professor of Clinical Surgery, University of Edinburgh. E. & S. Livingstone Ltd., Edinburgh and London. 1958. Price $6.50.

Curiosa et Trivia

WILLIAM B. MCCUNNIFF

January 1900 *Annals of Surgery* reports the removal by Dr. A. M. Cartledge of an ovarian tumor weighing 245 pounds.

Healthy pigeons have never been observed to sleep or close their eyes. Too bad they can't be trained to answer the telephone!

My, baby *has* grown! Available (if you could come by it) only as penicillin in 1945, antibiotics showed gross sales in 1958 of a whopping $380,000,000. Twenty years ago, such a prediction about "those contaminants" would have gotten you at least a ten day observation period on a locked ward!

Of the multitudinous types of news, the only classification of which the average American "wants more" is medical news.

Opossums have their own answer to hospital bed shortage. An entire litter of newborn opossums can be held in an ordinary teaspoon!

Capsule Clinics

- In more than 1,000 seborrheic warts, many of which were suspected of being malignant, cancerous transformation was found in less than 1 per cent. Pinkus, H., J. Michigan M. S. 58:576, 1959.

- Medical students experienced a significant increase in serum cholesterol levels during examination (stress) periods. Grundy, S. M. and Griffin, A. C., Circulation 19:496, 1959.

- Smoking four to six cigarettes in an hour markedly stimulates gastric secretion. Both the parietal and non-parietal cell components are stimulated. Piper, D. W. and Raine, J. M., Lancet 1:696, 1959.

- Even though gonorrhea is the most under-reported of the communicable diseases, about 1,000,000 new cases are known to occur each year in the U. S. More than 50 per cent occur in teen-agers. Fiumara, N. J., et al., New England J. M. 260:917, 1959.

From Clinical Clippings, the Francis Roberts Agency, Inc.

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WASHINGTON

H.R. 4700, the Forand bill, has been put aside for this session of Congress. Probably no little part of the opposition to the bill and the subsequent result was from the amount of protest against it given by individual physicians. While representatives of the medical profession appeared before the committee, physicians in Missouri, and without doubt in all other states, were active in their correspondence with their representatives in Congress.

While the legislation appears to have lost at this time, Representative Aime J. Forand, chief sponsor of the Social Security Health legislation, said that he was "hopeful of action early next year."

DR. LARSON TESTIFIED

Progress of voluntary health insurance plans and the detriment that H.R. 4700 would do to them was emphasized by Dr. Leonard Larson, Chairman of the Board of Trustees of the American Medical Association. He pointed out that there are now 25 plans in 23 states offering Blue Shield programs for those over 65 years of age. He stated that according to the Health Insurance Association of America, 60 per cent of senior citizens who need and want health insurance will have protection by the end of next year and that three quarters will be covered in 1965.

TESTIMONY OF DR. SWARTZ

In his presentation before the Ways and Means Committee, Dr. Frederick C. Swartz, chairman of the American Medical Association's Committee on Aging, pointed out that health of the aged is only a part of the over-all picture and should not be handled separately. He said in part: "The fundamental and over-riding reason for the opposition of the medical profession to this legislation is that it would, in our opinion, result in poorer—not better—health care for the people of this country. The American Medical Association's objective is —and always has been—to work toward the better health of Americans of all ages.

"We are for all proper courses of action which will help us attain that objective. We are against any course of action which hinders or prevents its attainment.

"As a doctor, it is my daily responsibility to help the aged—to treat them, to help them help themselves. . . . It has been my experience that the aged want just about the same things that all the rest of us do: to be part and parcel of their environment; to feel that their skills and talents have value and can still be used; to be productive; to be loved; to belong. There is no doubt about it, the problems of the aged are far broader than those of health alone.

"The public fails to realize that the older citizen continues to have many special needs—in the field of housing, in recreation, in finding acceptance and understanding within the community. He also needs preparation in advance if his added years of life are to be full and rewarding.

"These are not health problems, but they bear on health. And until society recognizes this, it will continue to consider in a piecemeal, hit-or-miss way a problem that requires a broad, total approach."

Among arguments that Dr. Swartz put forth were that the majority of illnesses of the older age groups are acute or degenerative, which need not call for expensive hospital stay or a surgical operation; over usage of hospitals simply because it is government-financed and thus overcrowding of hospitals; the partial government control of private hospitals which this proportionately large occupancy would bring; the discouragement of families and communities from taking care of their own, one of the big needs of the older citizen.

He concluded with the statement: "We believe that the same people who made this the healthiest nation in the world's history, and helped bring the gift of longer life to millions of Americans, are equipped to meet the problem of caring for the health of our older citizens."

OTHER OPINIONS

The President, at a news conference, in answer to a question about his opinion of medical care within the framework of the social security act, said he thought the question should be taken to the Secretary of Health, Education and Welfare. Secretary Flemming's position was made clear before the committee hearings that he was opposed to the bill. However, as pointed out by the Washington Report on the Medical Sciences, should the bill pass it would go to the White House for signature or veto, not to Mr. Flemming's office.

KEOGH-SIMPSON BILL

A hearing was held on July 15 on H.R. 10, the Keogh-Simpson bill and future hearings were indicated. The Medical Legislative Digest, published by the Council on Legislative Activities of the American Medical Association, stated that prospects for favorable consideration of the bill in its present or in an amended form are good.

The Woman's Auxiliary

Mrs. Stanley S. Peterson

Doctor, is your wife an officer, director, or committee chairman of the State Auxiliary? Is she a president, or president-elect of her county auxiliary? A past state president? If so, we are looking forward to seeing her in Springfield, September 23-24 for our Fall State Board Meeting. If she holds none of these offices, but is an enthusiastic, interested member of her auxiliary, we urge her to join us. And we urge you to join too, for a two-day vacation in the Ozarks.

Mrs. Stanley S. Peterson

Our meeting will start at noon on the 23rd, with a sandwich luncheon hostessed by the Greene County Auxiliary, followed by talks, discussions, demonstrations, reports, and displays on major Auxiliary projects.

Preceding the banquet that evening will be a social hour at which Greene County Medical Society members will be hosts, and following the dinner some of the doctors will present numbers from the "Greene County Hit Parade." You are cordially invited to attend this evening meeting.

The following morning our business session will be devoted to reports from officers, chairmen and county presidents, and to customary business. We will close with a luncheon at noon. We are trying to condense a great deal of useful information and helpful program ideas into these two meetings and are hoping our members will return to their homes inspired to fulfill our National President's slogan—"Individual Responsibility for Better Community Health."

During July, in response to a request from our national office, many of our members have been writing their Congressmen, expressing their opposition to the Forand Bill, H.R. 4700. Much credit is due our State Legislation chairman, Mrs. J. I. Matthews of Jefferson Ctiy, for her work in contacting the local auxiliaries.

If you receive your copy of the *A.M.A. News* at your office, may we urge you to take it home so that your wife may read it also? At the National Convention many of our speakers, and the A.M.A. representatives who spoke to us, in reply to our questions would say, "You will find it in the *A.M.A. News.*"

As this is being written, preparations are underway for the Missouri Council on Health Careers booth at the State Fair in Sedalia. The chairman this year is our own Paramedical Careers Recruitment Co-chairman, Mrs. A. P. Stephan, of Jefferson City. It is her task to coordinate the arrangements for displays of all the interested groups, such as x-ray technicians, dieticians, registered nurses, licensed practical nurses, social workers, physical therapists, occupational therapists, medical technologists, medical records librarians. Each day of the Fair one or two of the member groups are scheduled to be the "highlight" of the day and their own members come to the Fair to work in the booth, talking with visitors, collecting signatures of those interested in definite information, passing out brochures and setting up displays of their own that they would like to feature that day. Each day, student nurses from one or more of Missouri's medical and nursing schools are on hand to publicize their own schools. This is a tremendous undertaking, and Mrs. Stephan deserves much credit for her untiring efforts in recruitment.

A decision on policy has been passed along to us for dispersal to county auxiliaries which may be of interest to the doctors, also. A new popular-reading type magazine is being published by a group in the East—entitled *The Doctor's Wife.* First issue is scheduled for August or September. The publisher approached the Auxiliary for support and endorsement and requested the use of the membership list for circulation promotion. This was declined by the national board, and state and county auxiliaries are asked to adhere to this policy if approached for endorsement, support or a list of their members.

Again, may I invite you and your wife to join us in Springfield for information, inspiration and relaxation, September 23-24.

Across Missouri

Missourians have taken an active part in defeat of the Forand Bill, and these have not been limited to physicians. Mr. Arthur V. Burrowes, St. Joseph, president of the Missouri Public Expenditure Survey, sent a statement to the House Ways and Means Committee, which considered the bill, pointing out that over-taxed medical facilities and inadequate patient care would result from the bill. He pointed out that experience in England has demonstrated that when government-financed medical care is available, medical facilities are soon overtaxed, not only because of need, but simply because the treatment is accessible.

However, physicians in Missouri were also active in correspondence and contacts concerning the bill. Many letters were sent into the headquarters office, together with carbons of letters that had been sent. The tone of most of the correspondence indicated that these letters going into Washington did obtain good response from Congressmen.

Missouri manufacturing industries' hirings took another step forward in the late spring. May hiring at the rate of 4.6 workers per 100 was at a slightly higher level than the April rate of 3.8 workers per 100, recently compiled employment statistics by the Missouri Division of Employment Security revealed.

The *Greater Kansas City Medical Bulletin* made its appearance as Number 1, Volume LIV, of the *Jackson County Medical Society Weekly Bulletin* under the date of July 4. The publication has a new format, is 8 by 11 inches in size, and is devoted, as it states on the cover, to "Serving the Ten County Area." This includes Jackson, Clay, Ray, Cass, Lafayette and Johnson counties in Missouri, and Platte, Wyandotte, Johnson and Leavenworth counties in Kansas. G. Wilse Robinson, M.D., Kansas City, editor of the *Greater Kansas City Medical Bulletin,* reported to the council of the Jackson County Medical Society that space will be available in the new publication for the medical societies of the surrounding counties in order that they may prepare and present information and material relative to their activities. Dr. Robinson and the Society are to be congratulated on the appearance of the publication and its purposes.

For the first time in eleven months the cost of aid to dependent children showed a slight decline in June according to the Missouri Division of Welfare. The cost of old age assistance continued to decline slowly while the cost of aid to the permanently and totally disabled rose some.

The report gave the total June cost for old age assistance as $6,669,354, down $16,928, with 345 persons dropped from the rolls, making the number of recipients 119,367. The average check was for $55.87.

Aid to the disabled in June cost $895,639, up $2,729 with 41 persons added to the list, making a total of 15,458. The average check was for $57.94.

Aid to children totaled $2,342,740, down $13,275. A total of 259 children and 151 mothers were dropped from the rolls, making a total of 74,122 children and 14,585 mothers on the rolls. The average check was for $26.41.

The Department of Health, Education and Welfare has announced that the department will retain its headquarters in Kansas City, Region 6. However, there has been a realignment of states in the various areas and Region 6 will now cover Missouri, Iowa, Kansas and Nebraska. It formerly also covered Minnesota, North Dakota and South Dakota. North Dakota and South Dakota will be shifted from the Kansas City region to the Denver region and Minnesota to the Chicago region.

A National Park in Missouri is being discussed. Missouri has been growing in popularity as a vacation land for some little time. Recent figures show that during the first six months of this year, 1,920,610 persons visited state parks. This is an increase of 38 per cent over the same period in 1958, and approximately equals the number for a whole season a few years ago. From 1955 to 1958, people remaining at facilities in state parks over night rose from 78,700 to 190,000. Facilities also increased, not only at the state parks which have been in existence for some time, but several new parks have been added, including Table Rock, Trail of Tears and Wappapello.

The proposed National Park would be in Southern Missouri, encompassing the Current, Eleven Point and Jack's Fork rivers. At a conference in July, it was reported that officials of both the National Park and the U. S. Forest services were impressed with the possibilities of the area.

H.B. 1, the vendor bill, took effect on August 29. The following members were appointed by Mr. Proctor Carter, Director of Welfare, as the medical advisory committee: G. O. Lindgren, Kansas City; Gilbert H. Kroeger, D.O., Bethany; Louis W. Handley, Kirksville; Sen. Albert M. Spradling, Cape Girardeau; Sister Mary Isidore, St. Louis; Stanley S. Peterson, M.D., Springfield, and Avery P. Rowlette, M.D., Moberly. The committee is to set up standards for this program.

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I can't sleep..."

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Composition: Each light-pink, scored tablet contains 1 mg. 2-diethylaminoethyl benzilate hydrochloride (benactyzine HCl) and 400 mg. meprobamate.

References:
1. Alexander, L.: J.A.M.A. 166:1019, March 1, 1958.
2. Current personal communications; in the files of Wallace Laboratories.
3. Pennington, V.M.: Am. J. Psychiat. 115:250, Sept. 1958.

for depression

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Missouri Academy of General Practice

John F. Pearl, M.D.

Eleventh Scientific Assembly Meets November 7, 8

Saturday, November 7, 10:15 a.m.

SYMPOSIUM ON FRACTURES

Emergency Treatment of Fractures, Earl D. McBride, M.D., Oklahoma City, Clinical Professor of Orthopedic Surgery, Oklahoma University School of Medicine.

The Care of Open Fractures, Richard E. Lord, M.D., St. Louis, Clinical Instructor of Orthopedic Surgery, St. Louis University School of Medicine.

Management of Fractures of the Forearm, H. R. McCarroll, M.D., St. Louis, Associate Professor of Clinical Orthopedic Surgery, Washington University School of Medicine.

The Management of Trauma in Relation to Permanent Disability, Earl D. McBride, M.D., Oklahoma City.

Panel Discussion.

SYMPOSIUM ON HEMATOLOGY

Patho-Physiology and Treatment of the Megaloblastic Anemias, Richard H. Vilter, M.D., Cincinnati, Director, Department of Internal Medicine, University of Cincinnati College of Medicine.

Treatment of Chronic Lymphocytic Leukemia, Wayne R. Rundles, M.D., Durham, Professor of Medicine, Duke University School of Medicine, Chief of Hematology Laboratory.

Idiopathic Thrombocytopenic Purpura, Edward H. Reinhard, M.D., St. Louis, Professor of Medicine and Consultant in Oncology to the Department of Radiology, Washington University School of Medicine.

What Does a Low Hemaglobin Mean? R. O. Muether, M.D., St. Louis, Associate Professor of Internal Medicine, St. Louis University School of Medicine, and Director of Clinical Laboratories, St. Louis County Hospital.

Some Effects of Nutritional and Hematological Disorders on Cardiovascular Function, Richard W. Vilter, M.D., Cincinnati.

Diagnosis and Treatment of Multiple Myeloma, Wayne R. Rundles, M.D., Durham.

Panel Discussion.

Sunday, November 8, 9:00 a.m.

SYMPOSIUM ON MEDICINE

Space Medical Research-Status Report, Julian E. Ward, Major, USAF (MC) Chief, Biomedical Division Dioastronautics Directorate, School of Aviation Medicine, USAF, Randolph AFB, Texas.

The Recognition of the Aerophagic Syndromes, James L. A. Roth, M.D., Philadelphia, Professor of Clinical Gastroenterology, Graduate School of Medicine, University of Pennsylvania.

The Diet and Blood Lipids, Ancel Keys, Ph.D., St. Paul, Professor, University of Minnesota School of Public Health and Director, Laboratory of Physiological Hygiene.

Is Weightlessness a Medical Problem? Julian E. Ward, M.D., Randolph AFB, Texas.

Individualized Selection of Peptic Ulcer Operation, James L. A. Roth, M.D., Philadelphia.

Coronary Heart Disease in Different Populations, Ancel Keys, Ph.D., St. Paul.

Panel Discussion.

SYMPOSIUM ON OBSTETRICS

Fibrinogen-Fibrin Conversion Syndrome, C. Paul Hodgkinson, M.D., Detroit, Chief of the Department of Gynecology and Obstetrics, Henry Ford Hospital, and President-elect, American College of Obstetricians and Gynecologists.

Childbirth Without Fear of Interference, Clyde L. Randall, M.D., Buffalo, Professor, Obstetrics and Gynecology, University of Buffalo School of Medicine.

Management of Postpartum Bleeding, Carl Joseph Dreyer, M.D., St. Louis, Senior Instructor in Gynecology and Obstetrics, St. Louis University School of Medicine.

Hormone Treatment of Threatened Abortion, C. Paul Hodgkinson, M.D., Detroit.

Prolonged Labor, David G. Hall, M.D., Columbia, Assistant Professor, Department of Obstetrics and Gynecology, University of Missouri School of Medicine.

Placentas We Should Know—and Fear, Clyde L. Randall, M.D., Buffalo.

Panel Discussion.

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NEBRALIN is designed to duplicate the normal sleep pattern. It encourages muscular relaxation and induces sustained, relaxed sleep by the release of Dorsital and mephenesin in a timed-release tablet. Rapid-acting mephenesin quickly relaxes skeletal muscles to overcome "fatigue-tension" and conditions the body for sleep. Dorsital provides CNS sedation to induce sound, relaxed sleep. The initial and sustaining dosages are designed to keep the amount of barbiturate to be inactivated at any one time at a low level tapering toward morning. Evidence indicates that mephenesin is capable of producing sleep,[1] and when combined with a barbiturate enhances barbiturate action.[2,3] Moreover, the integrated action of the two components permits smaller dosages of each,[4] assuring your patients refreshed awakenings without "morning hangover."

1 Schlesinger, E. B.: Tr. New York Acad. Sc. 2:6, (Nov.) 1948.
2 Richards, R. K., and Taylor, J. D.: Anesthesiology 17:414, 1956.
3 Shideman, F. E.: Postgrad. Med. 24:207, 1958.
4 Berger, F.: Pharmacol. Rev. 1:243, 1949.

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Missouri Blue Shield—Blue Cross

Benefit payments by Missouri Blue Shield and Blue Cross Plans during their respective 1958 fiscal years set all time records, a study of recent Blue Shield and Blue Cross reports shows.

Missouri physicians received approximately $12 million for services rendered to Blue Shield members during the fiscal years reported. Another $29 million was paid by Blue Cross for hospitalization benefits.

St. Louis Blue Shield paid $6,485,688 in benefits in its fiscal year ended April 30, 1959, while the Kansas City Plan distributed more than $5,269,000 in the year ended Dec. 31, 1958. Compared with fiscal 1957, these were increases of nearly 4 per cent and more than 3½ per cent respectively. Blue Cross payments to hospitals increased more than 5 per cent in the St. Louis Plan area, nearly 4½ per cent for the Kansas City Plan.

On April 30, 1959, there were 947,918 Missourians protected by the St. Louis and Kansas City medical-surgical plans. The two Blue Cross Plans had a combined membership of 1,352,748, which is about 30 per cent of the state's population. This is near the national average for Blue Cross Plans.

St. Louis Blue Shield passed the half-million membership mark for the first time shortly before the end of the 1958 fiscal year, and by April 30 was protecting 516,955 people, an increase of 46,580 over the previous year. St. Louis Blue Cross increased its membership by some 35,000 to more than 885,000 members, the highest total since 1951 when some 178,000 members in Southern Illinois were transferred to the Illinois plan.

Although gross new enrollment in the Kansas City plans amounted to 62,000 during 1958, there were 15,000 fewer members at the end of their fiscal year than at the beginning. It appears, however, that this downward trend is being reversed in Blue Shield, which showed an increase of more than 7,000 members during the first four months of this year.

KANSAS CITY SOUTHWEST CLINICAL SOCIETY FALL CONFERENCE

The Annual Fall Conference of the Kansas City Southwest Clinical Society, October 5 through 8, in the Municipal Auditorium, Kansas City, will be linked for the first time with a concurrent meeting of the Royal Society of Medicine in Sheffield, England. This will be a clinicopathologic conference on "Cardiopulmonary Disease" with four of the guest speakers appearing on the Clinical Society program matching wits with four outstanding British physicians.

The conference will be so amplified that members attending meetings on both sides of the Atlantic will be able to hear all of the discussion. Duplicate x-rays, electrocardiograms and charts will be projected simultaneously at both locations so that everyone will see the same visual material at the same time. Speakers will be identified by tally lights flashed under their photographs which will be hung behind their counterparts on opposite sides of the Atlantic.

The British will lead off this exchange by presenting a case for discussion and diagnosis by the American panel. After a diagnosis has been made, and confirmed or disputed, the procedure will be reversed with the American panel presenting the British with its case. It is expected that a certain amount of rivalry will develop between the two panels as one attempts to out-diagnose the other. Observers at the two meetings will also be able to test their diagnostic ability as they will be in possession of the protocols to be used well in advance of the meeting.

This 37th annual meeting of the Clinical Society will be cosponsored by the University of Missouri School of Medicine as a part of their postgraduate program (see advertisement, page 1084). "New Horizons" is the theme of the meeting this year with the program offering depth of coverage of such subjects as headache, abdominal pain, cardiovascular diseases, trauma, new advances in enzyme chemistry and many others. An outstanding array of scientific and technical exhibits will round out the conference. All physicians who are members of their county medical societies are cordially invited to attend.

DR. M. PINSON NEAL HONORED

M. Pinson Neal, M.D., Columbia, was honored by the Missouri Society of Pathologists at a recent meeting, at which a plaque was presented to Dr. Neal. The plaque read: "The Missouri Society of Pathologists in recognition of his faithful service to pathology in the State of Missouri and for his untiring zeal in the cause of pathology as part of the practice of medicine, do hereby confer upon M. Pinson Neal the title of Honored Member, such membership to carry with it all the benefits and privileges of active membership but with only those obligations and duties that he himself shall care to assume." The plaque was dated July 19, 1959.

For arthritic M.S.: full corticosteroid benefits from new Gammacorten™

Patient M.S., 81, at the time of the first visit was in severe pain and very uncomfortable. Complained of swelling of wrists, legs and various joints; pain and stiffness in cervical area and lower spine; pain, swelling and limited motion in the fingers; slight ulnar deviation of the hand. M.S. demonstrates position necessary to put on his hat (motion was so restricted that he could not comb his hair).

Gammacorten T.M.
(dexamethasone CIBA)

- potent, effective corticosteroid
- profound anti-inflammatory activity
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From the files of a practicing physician. Photographs used with permission of the patient.

SUPPLIED: GAMMACORTEN Tablets, 0.75 mg. (pink, scored).

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Treatment and Result: After 36 hours of GAMMACORTEN therapy, M.S. had "complete relief." Joint swelling had decreased, pain was almost absent, range of motion had increased dramatically. At the end of the first week of GAMMACORTEN he was free of discomfort and able to return to his job as a porter. M.S. could put on his hat normally, could comb hair; joint function near-normal after first week.

Committee on Tuberculosis

A Continuing Plan for Eradication of Tuberculosis in Missouri

An all-out attack upon the tubercle bacillus needs to be launched, not only in Missouri but in the entire United States. The objective of this is the eradication of the tubercle bacillus in the shortest possible time. Complacency with regard to tuberculosis has filtered even into professional groups, and developed to such a high degree that one must stop now and face the fact that a steady decline of mortality rate since 1920 has not been paralleled by a similar decline in morbidity rate.

On the national level there is little difference in the number of new cases of tuberculosis discovered yearly from 1930 to the present. It is estimated that 250 thousand Americans have active tuberculosis; 100 thousand of these cases are unknown to health authorities. Approximately 1,150,000 have inactive tuberculosis. There is a tuberculosis death every forty minutes, and one new case discovered every six minutes. Approximately 90 thousand new cases of tuberculosis are reported annually.

Practically all individuals who harbor tubercle bacilli can be located if physicians, in their private offices and clinics, tuberculin test everyone. The number of reactors to tuberculin has decreased to the degree that in some areas there will be a small percentage of adults who are positive to this test. This great reduction in the number of reactors to tuberculin makes it possible to proceed with adequate follow-up.

The general public should be told that the characteristic reaction to tuberculin indicates that, at least microscopically, multiple lesions containing live tubercle bacilli are present in the body. They should also be informed that clinical disease occurs only among those who have taken tuberculosis germs into their system, and who, as a result, react to the tuberculin test.

Many people are infected with tuberculosis. Fortunately most people who are infected do not develop active disease. There is, however, no way of predicting who among the reactors will always remain free from active tuberculosis and who will develop this disease.

There is this aid, however, to offer: through periodic examinations including x-rays of the chest this disease can be found early.

Nonreactors to tuberculin should be retested periodically, preferably annually. In this way the occasional person who becomes infected in the interval and whose tuberculin converts from negative to positive may be found. He, too, needs then to be adequately examined and followed throughout the years.

It is the present objective in Missouri to launch a continuing extensive and intensive attack upon the population, continuing until no person harbors a tubercle bacillus. This cannot be accomplished until every person in every age group, residing in the State of Missouri, is tuberculin tested.

The Committee on Tuberculosis of the Missouri State Medical Association is cooperating with the Division of Health and the Missouri Tuberculosis Association to launch a complete eradication program. So that each physician in the state will be informed on the nature and progress of the initial attempts to get this program rolling reports will appear in MISSOURI MEDICINE. The cooperation of each member of the Missouri State Medical Association is necessary to the success of this—Our Tuberculosis Program.

SOUTHEAST MISSOURI CANCER CONFERENCE

The sixth annual Southeast Missouri Cancer Conference is scheduled for Cape Girardeau on Sunday, October 4. The conference is designed for physicians from Southern Illinois, Western Kentucky, Northern Arkansas, Northwestern Tennessee and Southeastern Missouri.

Guest speakers will include Chester Cassel, M.D., clinical associate and professor of medicine of the University of Miami School of Medicine; Robert A. Greene, M.D., clinical associate and professor of medicine, University of Minnesota School of Medicine; Donn G. Mosser, M.D., director, division of radiation therapy, University of Minnesota School or Medicine; and Stuart W. Arhelger, M.D., clinical assistant and professor of surgery, University of Minnesota School of Medicine.

Registration will take place at 12:30 p.m. with the clinical sessions getting under way at 1:30. Subjects included in this session will deal with thyroid diseases, office diagnosis and procedures, isotopes in diagnosis and treatment and lesions of distal bowel.

A hospitality hour will be held at 5:00 p.m. and at 6:00 o'clock the delegates will sit down to dinner. At 7:00 p.m. the evening clinical session and diagnostic symposium will be held.

The conference is sponsored by the American Cancer Society, the Missouri State Medical Association, the American Academy of General Practice and the Cape Girardeau County Medical Society. All sessions will be held at the Colonial Tavern restaurant. Plans are being made to entertain wives.

Missouri Medicine

JOURNAL OF THE MISSOURI STATE MEDICAL ASSOCIATION

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Vol. 56 September, 1959 Number 9

Oral Hypoglycemic Sulfonylurea Drugs

Four Years' Experience in the Treatment of Adult Diabetes Mellitus

NORMAN W. DREY, M.D.; BARRETT L. TAUSSIG, M.D., AND ROBERT RUBIN, M.D., *St. Louis*

THIS PRESENTATION reviews the experience of a group of clinicians who have cooperatively evaluated the sulfonylurea group of euglycemic agents available in this country for the treatment of diabetes mellitus. Following Janbon's[1] and Loubatieres'[2] original observations in 1942 that hypoglycemia of serious degree was associated with the administration of sulfonamidothiazole, the entire subject lay dormant outside of France. In the fall of 1955 three German groups (Frank et al.,[3] Achelis et al.,[4] and Bertram et al.[5]) published simultaneously pharmacological and clinical studies concerning the effects of carbutamide (BZ55) and tolbutamide (Orinase) (fig. 1). Within weeks after these publications, American studies, including the present observations, were under way. The American experience revealed quickly that there was appreciable toxicity from carbutamide, and it was withdrawn from further clinical trials. All of our observations have been made at the Jewish Hospital of St. Louis. Studies began with tolbutamide (Orinase) in December 1955, with chlorpropamide (Diabinese) in December 1957, and metahexamide (Euglycin) in December 1958.

STRUCTURAL FORMULAS OF THE ORAL HYPOGLYCEMIC SULFONYLUREAS

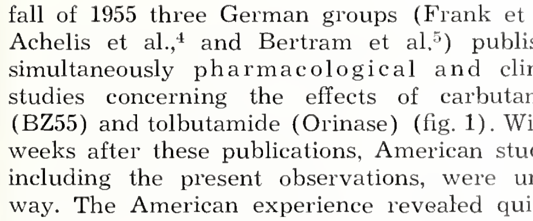
N (3 Amino 4 methylbenzenesulfonyl) N' cyclohexylurea (Metahexamide)
N (4 Methylbenzenesulfonyl) N' butylurea (Tolbutamide)
N (4 Chlorobenzenesulfonyl) N' n propylurea (Chlorpropamide)
N (4 Aminobenzenesulfonyl) N' n butylurea (Carbutamide)

Figure 1

METHOD

The schema of study was initially developed in connection with our first two years' experience with tolbutamide (Orinase) and the same general plan was applied in our subsequent observations with the newer euglycemic agents.[8, 9] In general, until some experience was behind us, our study cases were observed as hospital patients. Having obtained this experience, most subsequent patients have been observed as outpatients, unless they were newly discovered diabetic persons.

Most of our patients received a 2,000 calorie diet, totaling 250 gm. carbohydrate, 90 gm. protein, and 70 gm. fat, divided into three approximately equi-caloric meals. This basic diet plan required some adjustments in some cases, as indicated by the individual's body weight. The hospitalized patients collected daily 24-hour urine summaries, which were examined quantitatively for glucose by the Somogyi[6] (1941) method; true plasma glucose levels[7] were determined daily on fasting and 10:00 a.m. (two hours after breakfast) specimens; occasional 4:30 p.m. checks of the glucose plasma level were made. Outpatients were observed at weekly intervals. The plasma glucose levels were determined in patients fasting, then two hours after ingestion of the drug and breakfast. Patients would bring with them samples of two measured separate 24-hour urine summary specimens collected with preservative on successive days. All

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From the Medical Section, The Research Institute of the Jewish Hospital, and the Department of Medicine, St. Louis University, School of Medicine, St. Louis, Missouri.

This work has been supported by grants from The Upjohn Co., Chas. Pfizer and Co., and Eli Lilly and Co. Tolbutamide (Orinase), chlorpropamide and metahexamide (Euglycin) were furnished by The Upjohn Co., chlorpropamide (Diabinese) by Chas. Pfizer and Co., and metahexamide by Eli Lilly and Co.

patients received the drug immediately after the fasting blood sample was drawn and before breakfast.

Diabetic control was broadly classified as *adequate* and *inadequate*.[8, 9, 10] Adequate control was further qualified as *good* or *fair*. The following criteria were used in assessing the degree of control. A given patient was considered to be under *good* control when at least one of the following phenomena was observed: disappearance of the insulin requirement in the insulin-treated patients; disappearance of glycosuria with an associated fall in plasma glucose levels in the noninsulin treated, glycosuric patients; or a marked fall in the fasting and postprandial plasma glucose levels in the hyperglycemic patients from similar glucose levels while the patient was managed only by dietary restriction. These criteria, relating only to the biochemical aspects of control, have been combined with the following clinical objectives: clinical well being at all times (i.e., freedom from any symptom), achievement and maintenance of ideal body weight; absence of ketosis and hypoglycemic reactions. A given patient was considered to have a *fair* response when these criteria were partially fulfilled.

A systematic search for possible toxicity was carried out by careful physical examination. There were also periodic determinations of body weight, serum cholesterol, bromsulphalein retention, total and fractional serum proteins, cephalin-cholesterol flocculation, serum alkaline phosphatase, icterus index, prothrombin time and blood urea nitrogen. Urine analysis and complete blood counts, including platelet counts, were also done. Serum diastase, transaminase and bilirubin levels were determined in many of the cases, as circumstances dictated. Nedle biopsies of the liver were obtained in some cases before any euglycemic agent was given, and at varying times after therapy was instituted. These periodic biochemical and hematologic determinations were made at weekly intervals during the first month of therapy, monthly thereafter during the first year, and every three months thereafter. Clinic or office visits were made weekly the first month, and monthly thereafter.

RESULTS WITH TOLBUTAMIDE

Our early observations with tolbutamide involved 75 adult diabetic patients. Some of this group were lost during the early months of observation and are not included in our current study. This report involves long-term observation of 62 patients; 51 of these have been observed for more than 18 months and six for more than 36 months, the remainder for shorter periods of time (fig. 2). There are 45 (73 per cent) females and 17 (27 per cent) males in the series; 22 (36 per cent) of the patients are 40 to 60 years old (fig. 3) and 40 (64 per cent) 60 years old or older.

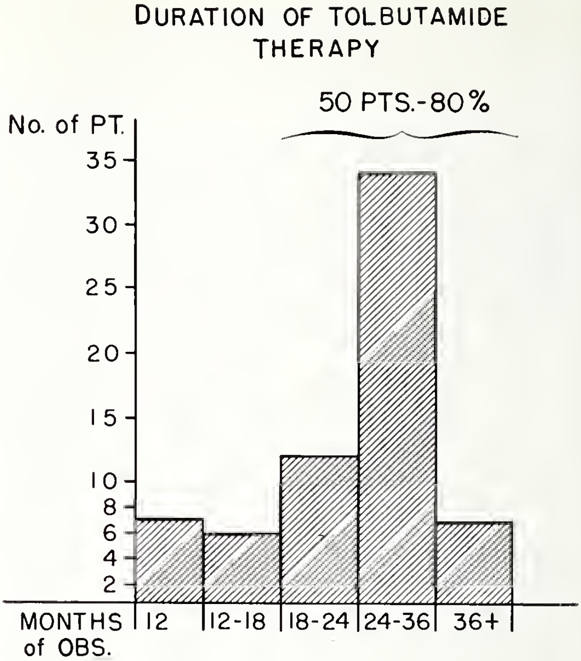

Figure 2

AGE GROUP	NO. of PATIENTS	
40-60	22	62
60+	40	
SEX		
MALE	17	62
FEMALE	45	

Figure 3

No juvenile onset diabetic patients are under observation with tolbutamide. Fifty-two of the patients are receiving 2.0 gm. or less per 24 hours (82 per cent) and 10 are receiving more than 2 gm. (fig. 4).

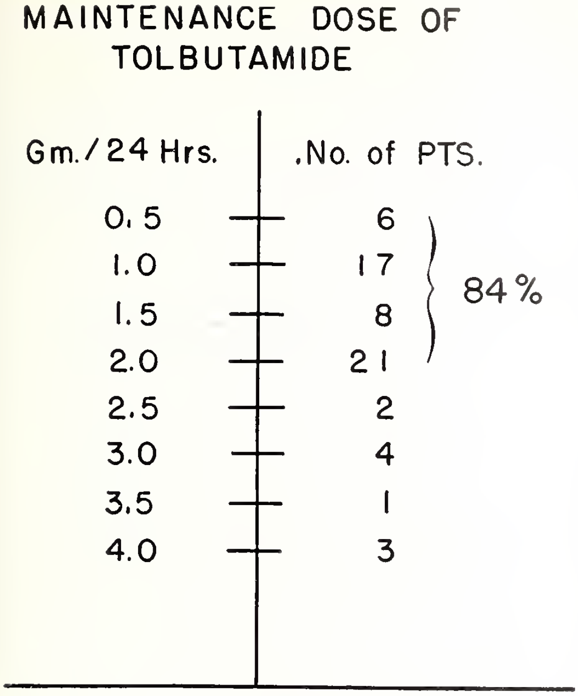

Figure 4

Response to long-term therapy revealed that 35 patients have had *good* control (56 per cent); 18 have had *fair* control (29 per cent), and 9 (15 per cent) responses have been inadequate after at least one month of adequate response, i.e., "secondary "failures" (table 1). The reasons for "secondary failures" is difficult to assess because of the many intangible factors which affect the course of the diabetic process. In our nine secondary failures we believe that chronic diet indiscretions were responsible in one case; worsening of the diabetic process itself was causative in two cases; complicating disease was a factor in one case, and an emotion-fraught domestic situation accounted for one secondary failure. In four cases we are unable to find a cause. We believe dietary lapses and emotional crises are of great importance. Accurate correlation of these factors in many diabetic patients is impossible. During the course of our studies we have observed on a number of occasions immediate improvement in diabetic control when patients have been hospitalized for special tests. This we attribute to diet kitchen accuracy in the diets served and eaten and the quiet security of the comfortable hospital environment.

TABLE 1
LONG TERM RESPONSE TO TOLBUTAMINE

Response	*No. Patients*		*Percentage*	
Adequate	53		85	
Good		35		56
Fair		18		29
Inadequate	9		15	

RESULTS WITH CHLORPROPAMIDE

Our long-term observation of adult diabetic patients receiving chlorpropamide comprises a series of 42 patients who now have received the drug for as long as 14 months (fig. 5). The age range is from 33 to 76 years, and there were 14 males and 28 females in this series (fig. 6). All of these patients had "adult onset" type of diabetes, except one 59-year old male whose diabetes was stable but who had a "juvenile type" onset at the age of 33. He proved to be an immediate failure on chlorpropamide. The selection of case material was influenced by our prior experience with tolbutamide. The initial dose was 1 gm., given before breakfast. We adhered to this in our first 14 patients but, because of the high incidence of hypoglycemic reactions, all subsequent patients received initial doses of 0.5 gm. In all but two cases, the maintenance dose was either 0.5 gm. or less (table 2). In two cases, maintenance control has been successful on 0.05 gm. taken before breakfast. The definite effect of this low dosage has been demonstrated in both cases by deterioration of diabetic control following omission of the drug for one month.

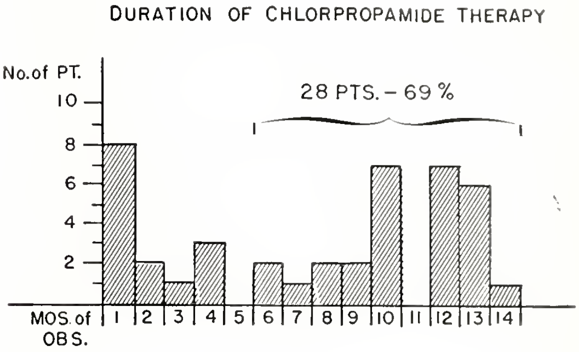

Figure 5

TABLE 2
INITIAL AND MAINTENANCE DOSE OF CHLORPROPAMIDE

MGM./24 Hrs.	*No. of Cases* INITIAL	*No. of Cases* MAINTENANCE
1500	1	0
1000	12	1
750	0	1
500	20	22
400	0	0
300	0	1
250	5	5
200	1	3
100	2	7
50	1	2

Our results to date reveal that we have obtained *good* control in 28 cases (66 per cent), *fair* control in eight cases (19 per cent). Thus *adequate* control has been observed in 85 per cent of the chlorpropamide treated patients (table 3). This is almost identical with our tolbutamide experience. There have been six treatment failures, two of them fully anticipated by our prior experience with tolbutamide. Both cases were borderline juvenile type and had been receiving from 40 to 60 units of insulin per day. Three instances of "secondary failure" occurred in which dietary lapses were strongly suspected. In one failure no cause could be determined.

TABLE 3
RESULTS OF CHLORPROPAMIDE THERAPY IN 42 ADULT DIABETIC PATIENTS

	Control on Chlorpropamide			*Totals*
	Adequate		Inadequate	
	GOOD	FAIR	POOR	
Number	28*	8	6	42
	69%	19%	12%	100%
	88%			

* Three patients included who showed good results for two to three weeks. Drug stopped because of toxicity.

TABLE 4
METAHEXAMIDE SERIES

Case	AGE	SEX	WT.	*Liver Biopsy*		*Abnormality*		*Dosage*			*Diabetic Control*
				INITIAL	REPEAT	LIVER PROFILE	LIVER BIOPSY	INITIAL	MAINT.	TOTAL	
1. M. W.	69	M	Normal	11- 7-58	12- 6-58	Normal	Healing Pericholangitis	0.1	0.2	5.6	Good
2. L. Z.	50	M	Normal	1-16-59	2- 5-59	Abnormal	Acute Pericholangitis	0.5	0.2	5.7	Good
3. F. N.	69	F	Mod. obese	None	None	Abnormal	....	0.2	0.3	7.4	Good
4. K. K.	55	M	Normal	None	None	Abnormal	....	0.5	0.4	10.7	Good
5. B. K.	48	F	Normal	1-25-59	2-23-59	Abnormal	Acute Pericholangitis*	0.5	0.1	...	Good
6. J. S.	70	M	Normal	12-28-58	....	Normal	?	0.3	0.1	...	Good

* Control biopsy showed specific diabetic vasculitis.

RESULTS WITH METAHEXAMIDE

We have observed six patients receiving metahexamide (table 4). The age range is from 48 to 70 years and there were four males and two females. All of these patients had maturity onset type of diabetes. Two of these patients were newly discovered diabetic persons; two had been managed on diet alone and two had received 10 to 15 units of insulin for three to four years. All of these cases have shown *good* control during the observation period. The longest observation has been three months.

TOXICITY AND DRUG SENSITIVITY

The question of toxicity of these drugs has been carefully pursued with screening procedures already enumerated. With tolbutamide there have been no evidences of hepatic, thyroid, renal or hematologic complications. We have encountered one urticarial reaction, which cleared promptly with cessation of tolbutamide. Relatively minor gastrointestinal complaints, including slight nausea and epigastric fullness, have occurred. These subsided with lower dosage in all cases except one in which it was necessary to discontinue the drug. O'Donovan,[11] in reviewing side effects occurring in association with the use of tolbutamide in 9,168 cases, found reactions in 292 instances (3.2 per cent), but the drug required discontinuance in only 140 patients (1.53 per cent). Our experience completely parallels O'Donovan's results.

Toxicity with chlorpropamide was carefully studied for a number of reasons: its structural similarity to chlorpromazine; a high alkaline phosphatase in our first case, later proven to have complicating Paget's disease which caused it; occasional flare-ups in cephalin flocculation positivity. We have already mentioned that relatively early in our chlorpropamide experience our initiating dose was reduced to .5 gm. per 24 hours, and at this and the lower maintenance doses evidence of toxicity have been minimal. In all cases in which the cephalin flocculation positivity occurred, complete liver profiles revealed no other abnormalities. We have encountered no abnormality in the alkaline phosphatase levels since the first case, nor have we seen the icterus index rise. We have observed no dermatologic, hematologic, thyroid or renal evidences of toxicity. Occasional mild gastrointestinal disturbances have occurred, and in one case a bitter metallic taste impelled a patient to demand a return to tolbutamide. Other investigators using higher dosage levels have described cases of jaundice associated with elevated alkaline phosphatase levels. Biopsies in these cases have shown a cholestatic icterus (intra-canalicular biliary stasis) and this has been interpreted as drug hypersensitivity or idiosyncracy. We have encountered in one case with a normal control liver biopsy, histologic evidence of a subacute healing pericholangitis, which was subclinical and gave no biochemical evidence of hepatic dysfunction.[13]

Metahexamide is currently under intensive clinical investigation in this country, but has not been released for general use. Early reports[12] in 1,646 cases of adult diabetes, coming from 185 physicians or investigating groups, have revealed the following toxic manifestations:

Gastrointestinal symptoms (Epigastric discomfort, burning, fullness, etc.)	81 cases
Central nervous system symptoms (Headache, light-headedness, etc.)	4 cases
Drug fever	1 case
Skin reactions	9 cases
Hepatic sensitivity or hepatotoxic reactions	9 cases

Our own experience with metahexamide has been far less satisfactory than the summarized experience.[13] However, our dosage for the most part has been higher than the average initial and maintenance doses used in most reported cases. Our initial dosage has been as high as 500 mg. daily and maintenance dosage in most of our patients has been 200 mg. daily or less. The hypoglycemic effect of the drug has been satisfactory in all our cases and presumably so in the composite series of 1,646 cases cited. However, in five of our six cases treatment has been discontinued because of histological or biochemical evidence of liver dysfunction (table 4). Studies with metahexamide continue intensively and one can only conclude at this time that the drug is not ready for general distribution.

SEX, AGE DISTRIBUTION AND STATE OF CONTROL OF DIABETES MELLITUS IN 42 PATIENTS RECEIVING CHLORPROPAMIDE.

		SEX		Control on Chlorpropamide	
Age Range	No. of Cases	♂	♀	Adequate	Inadequate
30 40	4	1	3	2	2
41 50	7	2	5	7	0
51 60	13	4	9	12	1
61 70	16	6	10	14	2
71 80	22	1	1	1	1
	42	14	28	36	6

Figure 6

COMMENTS

The tables presented concerning dosage of the various agents suggest the relative potency of each with reference to hypoglycemic effect. Taking tolbutamide as a standard of reference, chlorpropamide mg. for mg. is about four times as potent, and metahexamide eight to ten times as potent as tolbutamide. All of the sulfonylurea hypoglycemic drugs are suitable only for the treatment of the stable adult onset type of diabetes mellitus. They do not seem to be helpful in the treatment of the unstable brittle juvenile diabetic patient and we do not recommend combining them with insulin therapy. In general, adult patients whose diabetes is of recent onset and/or whose insulin requirements are less than 25 units per day do best on sulfonylurea hypoglycemic drugs. Any severe infection, trauma, or keto-acidotic complicating event warrant prompt transfer of the patient to an insulin regimen adapted to the immediate needs.

In conclusion, it is well to remember the view of Garfield Duncan[14] with whom we are in complete agreement. Duncan has repeatedly pointed out that the vast majority of adult patients with diabetes are obese, and that correction of the obesity alone leads to satisfactory control of the diabetic process in a large percentage of these patients. When to this large group of patients is added the group of diabetic patients of "juvenile type," we are left with a rather small number of patients whose disease process is suitable for management with the oral sulfonylurea hypoglycemic agents.

SUMMARY

Experiences with tolbutamide, chlorpropamide and metahexamide, now in their fourth year at the Jewish Hospital of St. Louis, are reviewed. The investigative procedures and the results of therapy are presented. The toxicity and sensitivity reactions, including needle biopsy studies before and during therapy with each drug are reviewed.

Addendum: Increasing evidence concerning the hepatotoxicity of metahexamide, confirming our observations, has led both Upjohn Co. and the Eli Lilly Co. to discontinue all clinical trials with this drug.

Acknowledgments: The administrative aspects of these studies were ably carried on by members of the Women's Volunteer Service of the Jewish Hospital of St. Louis. Case material for some of these studies has been loaned to the program by the following staff members of the Jewish Hospital of St. Louis and appreciation is hereby acknowledged: Drs. Harry Agress, Aaron Birenbaum, Murray Chinsky, Ray Charnas, Bernard DeHovitz, I. Jerome Flance, Max Franklin, Roy Greenbaum, Michael Karl, Lawrence Kotner, Martin Levin, Robert Potashnik, Llewelyn Sale, Jr., Harold Scheff, Burton Shatz, Arthur Strauss, Robert Weinhaus.

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Pulseless Extremities

Current Management

RAY W. GIFFORD, JR., M.D., *Rochester, Minn.*

RECENT ENTHUSIASM for arterial surgery in the management of occlusive arterial disease makes it appropriate to review the subject in an attempt to place medical and surgical management in their proper perspectives. To facilitate discussion, this subject is best divided into two major categories: first, the management of sudden arterial occlusion and second, the management of chronic occlusive arterial disease.

Sudden arterial occlusion constitutes a medical emergency, while the treatment of chronic occlusive arterial disease can be undertaken more deliberately for, in the latter situation, time is on the side of the physician rather than against him.

SUDDEN ARTERIAL OCCLUSION

Sudden arterial occlusion may result from either embolism or thrombosis in situ. Differentiation between these two causes of sudden arterial occlusion is not always easy since the clinical pictures are similar. Fortunately, the determination of the exact cause is usually unnecessary for the emergency treatment of the ischemic part, and should be considered secondary to such treatment. Each hour of delay in onset of proper treatment has an unfavorable effect on prognosis both for life and limb.

Because no treatment at all is preferable to ill-advised treatment, it seems necessary to emphasize that elevation of the extremity and the direct application of heat exceeding 90 F. to it are contraindicated and may do irreparable harm. The patient should be placed in a warm environmental temperature (85 to 90 F.) to encourage reflex vasodilatation, however. The extremity should be loosely wrapped in a protective dressing of cotton and roller bandage to shield it from trauma and to conserve body heat. The extremity should be in a slightly dependent position. The use of an oscillating bed adjusted to the maximal-low-foot and minimal-low-head position is helpful if available. A thermostatically controlled therapeutic heating box may be placed over the extremity provided the temperature of the air about the limb does not exceed 90 F. It is important to administer opiates in doses large enough to control the pain of the acute ischemia.

Anticoagulants should be given at once, and administration should be continued as long as the patient is in the hospital unless surgical intervention is contemplated. Fifty milligrams of undiluted heparin are injected intravenously every four hours until therapeutic deficiency of prothrombin activity can be achieved by administration of one of the coumarin preparations, such as dicumarol or coumadin. Thereafter, anticoagulant therapy can be maintained by the use of dicumarol or coumadin alone, adjusting the dose to keep the Quick one-stage prothrombin time at about twice or two and a half times the normal value. Only the most urgent contraindications to anticoagulant therapy should prevent its use for patients with sudden arterial occlusion, for it not only prevents propagation of the thrombus or embolus, but it also inhibits thrombosis in collateral arteries and accompanying veins when the endothelium has been damaged by ischemia.

If embolectomy is contemplated, the coumarin anticoagulant should be omitted and heparin alone used, for the anticoagulant effect of a single dose of heparin persists for less than four hours and can be rapidly neutralized by intravenous administration of protamine if necessary. If for any reason the patient with sudden arterial occlusion cannot take medication by mouth and it is considered desirable to use a coumarin anticoagulant, warfarin sodium (coumadin) can be given parenterally.

Ethyl alcohol is a particularly useful vasodilator for use in this emergency since it is also an anodyne and sedative. It is my custom to give whiskey in doses of 1 or 2 ounces every three or four hours during the acute stage of arterial occlusion. If alcohol cannot be tolerated orally, it can be given intravenously in a 5 per cent solution. Other arterial dilating drugs that have been found helpful include papaverine hydrochloride and tolazoline hydrochloride (priscoline). In the acute phase of sudden arterial occlusion it is preferable, if possible, to administer one of these drugs into the brachial or femoral artery of the involved extremity. If the occlusion is more proximal so that the brachial or femoral artery is not palpable, one must be content with the intravenous route. Whether given intra-arterially or intravenously, the usual dose of papaverine is 60 mg. and of tolazoline is 25 or 50 mg. Injections can be repeated at intervals of four hours if satisfactory vasodilatation is being achieved. If one drug fails, the other should be tried.

Section of Medicine, Mayo Clinic and Mayo Foundation, Rochester, Minnesota.

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The Mayo Foundation, Rochester Minnesota, is a part of the Graduate School of the University of Minnesota.

Regional sympathetic block whether induced by spinal or epidural anesthesia or by direct injection around paravertebral ganglia should not be performed when patients are receiving anticoagulant drugs, for serious hemorrhage at the sites of such injections is a real danger. If such regional blocks are to be done, they should be carried out before anticoagulants are started and should not be repeated as long as anticoagulants are being administered. It is my feeling that these two forms of treatment are mutually exclusive, and experience dictates that anticoagulant therapy is the more important of the two because it has more constantly yielded beneficial results.

Embolectomy.—The indications for embolectomy are not clearly defined. If embolectomy is to have a reasonable chance of success, it should be undertaken early, preferably within six and certainly within 12 hours of onset of symptoms of sudden arterial occlusion, and the embolus should be proximal to the bifurcation of the popliteal artery because of technical difficulties encountered in operating on arteries of smaller caliber. When embolectomy is performed within a few hours after onset of sudden arterial occlusion, results have been encouraging,[1] but nonsurgical treatment if instituted early[2, 3] has been effective also. Furthermore, it is important to realize that more than 90 per cent of patients who have embolic closure of an artery have heart disease[3] and for them the surgical risk is high because of this. It is imprudent to attempt embolectomy for a patient whose general condition is so precarious that the chances of saving a limb are not much greater than the risk of losing a life. In the light of present knowledge it would appear wisest to reserve embolectomy for those patients whose general condition is satisfactory and whose sudden arterial occlusion has been of recent onset, that is, less than 12 hours but for whom one to four hours of medical treatment have failed to produce appreciable benefit. Results from surgical intervention are less good when sudden arterial occlusion is due to thrombosis in situ.[4] This is probably because thrombi tend to be more adherent to the walls of the artery and to extend over longer segments than do emboli.

Long-Term Treatment.—Because of the tendency for thrombo-embolic phenomena to recur, it is reasonable to advise long-term therapy with anticoagulants after the patient has recovered from the acute episode. This advice, of course, has to be influenced by the availability of laboratory facilities for obtaining determinations of prothrombin time and by the presence of contraindications or relative contraindications in each case. The indications for long-term anticoagulant therapy are probably greater when the sudden arterial occlusion is caused by an embolus which has originated in the dilated chambers of a rheumatic heart than when it is due to thrombosis in situ.

CHRONIC OCCLUSIVE ARTERIAL DISEASE: GENERAL CONSIDERATIONS

For the purposes of this discussion and the sake of brevity, it is reasonable to omit the rare causes of chronic occlusive arterial disease and concentrate on the patients who have ischemic extremities owing to either atherosclerosis obliterans or thromboangiitis obliterans. It is important both from the standpoint of treatment and prognosis to distinguish between these two types of chronic occlusive arterial disease if possible (table 1). The general principles of management of chronically ischemic extremities are the same regardless of the etiology of the ischemia with three important exceptions: (1) Abstinence from tobacco is a helpful adjunct to treatment of all types of occlusive arterial disease, but it is essential in the treatment of thromboangiitis obliterans because tobacco appears to be implicated etiologically in the pathogenesis of this disease. In the treatment of thromboangiitis obliterans all other measures are ancillary and doomed to failure as long as tobacco is used even

TABLE 1

COMPARISON OF ATHEROSCLEROSIS OBLITERANS AND THROMBOANGIITIS OBLITERANS

Distinguishing Features	*Atherosclerosis Obliterans*	*Thromboangiitis Obliterans*
Pathology	Lipid infiltration of intima leading to thrombosis	Panarteritis with intimal proliferation and thrombosis
Age at onset	More than 40 years	20 to 45 years
Symptomatic involvement of upper extremities	Rare	40 per cent
Involvement of veins (superficial thrombophlebitis)	Never	40 per cent
Arteries most frequently involved	Terminal aorta, femoral, popliteal, posterior tibial, dorsalis pedis	Dorsalis pedis, posterior tibial, radial, ulnar
Calcification of arteries on roentgenograms	Frequent	Never (unless there is coexisting atherosclerosis)
Diabetes mellitus	20 Per cent	Only average incidence
Sex	80% male (incidence in females rises after menopause)	99 per cent male
Plasma lipids	Frequently elevated	Usually normal

in small quantities. (2) The lesions of thromboangiitis obliterans characteristically occur in small and medium-sized arteries and are, therefore, not amenable to surgical resection or bypass procedures as are some lesions of atherosclerosis obliterans which occur in larger arteries. (3) The ultimate prognosis for patients with thromboangiitis obliterans is excellent because the disease can be arrested, if not reversed, and because it is usually limited to nonvital arteries in the extremities where it does not carry with it the threat to life that does a disease like atherosclerosis obliterans, which can and often does involve arteries to vital viscera.

In a discussion of the management of patients with chronic occlusive arterial disease, it is helpful to divide the subject into medical and surgical treatment. This is probably an artificial division since surgical and nonsurgical or medical treatment should be combined into an effective and harmonious program. Nevertheless I feel that the discussion can be more succinct and valuable if surgery and indications for it are discussed separately.

MEDICAL TREATMENT OF CHRONIC OCCLUSIVE ARTERIAL DISEASE

Mild-to-Moderate Ischemia With Intermittent Claudication.—The average patient with chronic occlusive arterial disease involving the lower extremities will first notice intermittent claudication, and this complaint will bring him to the physician's office. When ischemia is not severe as determined by minimal or no color changes with elevation and dependency, when there are no ischemic or pretrophic lesions and when there is no rest pain, treatment can be conducted on an ambulatory basis and consists mostly of advice with regard to the care of feet, abstinence from tobacco and a low-fat diet if blood lipids are elevated. It has been estimated that nearly 50 per cent of amputations for gangrene could be prevented if the patient and physician would exercise reasonable prophylaxis in the care of ischemic extremities.[5] Nothing is more important to patients with chronic occlusive arterial disease than careful and diligent instructions about the proper care and hygiene of their feet. This is the first matter that I discuss with them.

Physicians familiar with the treatment of occlusive arterial disease often lament that minor injury frequently leads to major amputation. The patient must be ever vigilant to avoid crushing or bruising ischemic hands or feet and to avoid scratches, cuts, fissures in the skin, burns, blisters and frostbite. Only comfortable shoes that do not bind or rub should be worn, and new shoes should be broken in gradually by wearing them about an hour daily. Immersion of the feet in hot water and the direct application of hot water bottles or heating pads to the feet should be strongly condemned. Likewise exposure to cold temperatures can be injurious unless the patient is warmly attired and the ischemic extremity is protected adequately by proper footware. Toenails should be cut straight across; corns, calluses and bunions should not be trimmed or incised. Removal of ingrown toenails is hazardous. Minor surgical procedures on the feet should be avoided. If the skin is excessively dry and tends to crack or scale, hydrous lanolin or cocoa butter should be applied gently every day. Patent medicines for the treatment of corns, calluses and athlete's foot should be avoided, for they may contain chemical irritants such as iodine, merthiolate, phenol, cresol, lysol or similar agents which can harm the ischemic skin. Adhesive tape or adhesive plaster should not be applied to the skin of an ischemic extremity.

Trichophytosis can be treated in the acute stage by soaking the feet for half an hour twice daily in a 1:10,000 solution of potassium permanganate. In the subacute stage, trichophytosis can be effectively and safely controlled by the application of an ointment containing undecylenic acid (desenex) to the affected areas at bedtime and the use of a dusting powder containing undecylenic acid in the shoes during the day. Stopping the use of tobacco may prolong the claudication time (time from beginning to walk until onset of claudication) for some patients, especially when arterial spasm is playing a prominent role. As mentioned before, abstinence from tobacco is the sine qua non of treatment for thromboangiitis obliterans. For patients with atherosclerosis, a diet limited in animal fat to 25 per cent of calories or less is prescribed if the concentration of serum lipids is elevated. The use of unsaturated vegetable oils such as corn oil or cottonseed oil is desirable and makes the diet more palatable.

I have been disappointed in the effect of vasodilating agents, which are advocated, mostly by pharmaceutical houses, in the treatment of intermittent claudication. Carefully controlled studies reveal that most patients do not receive objective benefit from any of the vasodilating drugs presently available. Nevertheless, there is no objection to trying one of these in an effort to increase the claudication distance. Patients soon learn that if they walk slower, they can walk farther. Reduction of weight when indicated may be helpful in increasing the distance that can be walked. Follow-up studies by Massarelli and Estes[6] and Schadt and Hines[7] have shown that the prognosis with regard to survival of extremities with atherosclerosis obliterans involving the aorta, iliac or femoral arteries is extremely good for nondiabetic patients. Such patients are entitled to the assurance that the incidence of major amputation is approximately 5 per cent over average periods of observation that have approached 10 years. Here again it is well to emphasize that the patient himself can do much to insure survival of his ischemic extremities by exercising reasonable precautions in taking care of his feet.

Severe Ischemia With Rest Pain.—When ischemia is more severe, patients begin to experience pain at rest in the ischemic extremity and inspection reveals rather marked pallor on elevation and rubor on dependency. Persistent cyanosis or coldness of one or more digits may signify impending gangrene. Patients in this predicament should be hospitalized and kept at rest in bed except for bathroom privileges. Elevation of the head of the bed on 6 or 8 inch blocks is helpful if edema is not present.

A thermostatically controlled, therapeutic heating box[8] is placed over the ischemic extremities unless this aggravates the pain. The temperature is kept between 85 and 90 F.

I also routinely employ an oscillating bed on which the patient rides for eight hours out of every 24. Edema, active infection and cellulitis constitute relative contraindications to the use of the oscillating bed.

It is important to control the pain of patients who have severe ischemia with pain at rest. Ischemic pain is severe, is worse at night and is resistant to narcotics. It prevents sleep, it inhibits appetite, and it wrecks morale. The tortured patient begs for relief which frequently can be achieved only by the liberal use of narcotics. When aspirin and codeine fail, I prefer the use of levorphanol tartrate (levo-dromoran) in doses of 2 mg. or more given at regular intervals of every four or six hours. Sometimes the concomitant administration of promazine hydrochloride (sparine) in doses of 25 or 50 mg. every four hours potentiates the effect of the levorphanol. Patients with severe ischemia must be given enough narcotics so that they are not obliged to allow the ischemic leg to dangle over the edge of the bed in an attempt to get relief from pain. This is a vicious practice because it favors edema which further embarrasses the circulation to an already impoverished extremity.

Uncontrollable pain that is leading to insomnia, anorexia, exhaustion, dehydration, confusion and delirium is a justifiable indication for amputation even though frank gangrene is not present.

For patients with severe ischemia I prefer the regular use of whiskey to any other vasodilators. Contraindications such as cirrhosis of the liver, history of chronic alcoholism and duodenal ulcer must be respected. Anticoagulants are sometimes given to patients with severe ischemia and impending gangrene, although it is difficult to evaluate their effectiveness objectively.

Severe Ischemia With Ulceration and Gangrene.—When ischemia leads to ulceration or frank gangrene, the prognosis becomes even more ominous, and in addition to the therapeutic heating box, the oscillating bed, narcotics and whiskey, local treatment to the necrotic areas is indicated.

The prophylaxis of ulceration and gangrene and the control of fungus infection using a solution of potassium permanganate and undecylenic acid (desenex) ointment have already been discussed. Conservatism is the wisest course in the local treatment of ischemic ulcers. Overzealous attempts to combat infection and to encourage healing usually result in more necrosis, for ischemic tissue is extremely vulnerable to chemical irritants. To eradicate infection, the hand or foot may be soaked in a saturated solution of boric acid for 20 or 30 minutes three or four times daily. At times it is advantageous to use continuous moist packs of the solution of boric acid but maceration of viable tissue by prolonged application of wet dressings should be avoided. Occasionally a 1:10,000 solution of potassium permanganate may be used to soak the foot. The temperature of the solution applied to ischemic lesions should never exceed 95 F.

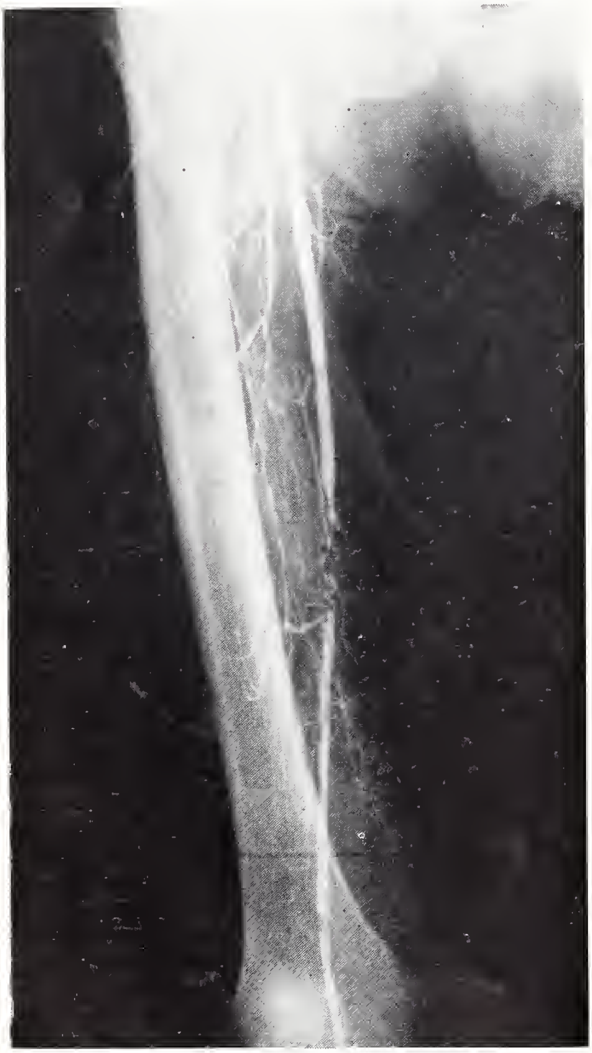
It is a clinical impression that ointments can impede healing, and the fear of sensitivity has made me hesitant in applying antibiotics and sulfonamide derivatives locally to ischemic lesions. If sensitive organisms are cultured from the lesion, appropriate antibiotics are administered systemically. Occasionally the local application of a 1 per cent solution of neomycin is helpful when the ulcer is infected with organisms resistant to other antibiotics. When infection has subsided, the application of dry powdered erythrocytes to the ulcer often promotes healing. The cells are allowed to form a dry crust over the ulcer. This crust is removed every three or four days by application of wet dressings of a solution of boric acid. After the base of the ulcer has been inspected and progress noted, more cells are applied.

When a necrotic crust or eschar covers an ulcer, enzymatic debridement using dressings moistened with a mixture containing 100,000 units of streptokinase and 25,000 units of streptodornase (varidase) per 20 cc. of physiologic saline solution may be helpful in removing the crust. Similar quantities of the enzymes may be dissolved in 5 cc. of sterile distilled water and added to a jar of carboxymethylcellulose jelly which then can be applied to the ulcer. Surgical debridement of ischemic lesions should be avoided if at all possible but, when necessary, should be gentle and conservative.

When amputation is inevitable but the general condition of the patient makes surgery hazardous, valuable time can be gained, pain can be relieved and absorption of toxins can be stopped by packing the ischemic extremity in ice. This can be continued for several days or weeks if necessary while the patient is being prepared for amputation. Refrigeration is contraindicated, however, as long as there is hope for saving the limb. Amputation should be performed well above the level of refrigeration to avoid delayed healing. Further discussion of amputation will be given later with the rest of the surgical treatment.

SURGICAL TREATMENT OF CHRONIC OCCLUSIVE ARTERIAL DISEASE

Direct Arterial Surgery.—When atherosclerosis leads to segmental occlusion of the terminal aorta, iliac, common femoral or superficial femoral arteries, direct arterial surgery is sometimes helpful in restoring arterial blood flow and relieving intermittent claudication. The obstructed segment of artery can be opened to remove the atheromatous debris and thrombus along with the underlying and diseased intima. This operation is called "thrombo-endarterectomy." Most surgeons now prefer to use synthetic prostheses to replace or bypass the obstructed arterial segment. Before such an operative procedure is undertaken, aortograms or femoral arteriograms, or both, should be obtained so that the status of the major arteries distal to the occlusion can be evaluated adequately. The segment or segments of obstruction should be short enough to make operation on an artery feasible and the arterial tree distal to the site of obstruction should be open to assure adequate runoff from the graft (figure 1).



Femoral arteriogram showing segmental occlusion of superficial femoral artery in the adductor canal; the short segment involved and the excellent runoff distally make bypass surgery technically feasible in this case.

With present technics, most vascular surgeons do not think that it is feasible to replace or bypass obstructed segments in arteries smaller than the popliteal artery.

The mere presence of a segmental occlusion which is amenable to surgical treatment is not a sufficient indication for an operation. In my experience, the chief indication for operating directly on an artery is intermittent claudication which is disabling enough that the patient wishes to undergo the operation understanding the risks involved. An operation on the artery would be desirable, of course, in an effort to improve the circulation when severe ischemia is present distally in the extremity with impending gangrene. However, in my experience, patients who have segmental occlusive lesions in the larger arteries seldom have severe ischemia distally. Conversely, patients with severe distal ischemia usually prove to have obstructive disease in the smaller more peripheral arteries where direct arterial surgery is not possible. Consequently, few patients with severe ischemia can be helped by direct operation on an artery. The patient's general health must be good enough to withstand a major operation. Symptomatic coronary atherosclerosis is a contraindication to such operation, for not only is the risk of the surgical procedure greater but the relief of intermittent claudication for a patient with angina pectoris is of questionable value. It is a clinical but unproved impression that diabetes mellitus is a relative contraindication to surgical procedures on the aorto-iliac or femoral artery. Perhaps this is true because smaller more peripheral arteries of diabetic patients tend to be involved. I have already discussed the necessity for patency of the arteries distal to the site of occlusion for adequate runoff. Finally, it must be the patient's choice.

Follow-up studies indicate that chronic occlusion of the femoral and iliac arteries and aorta is not associated with appreciable mortality from the occlusion per se.[6, 7] Therefore, this type of surgical procedure is not a lifesaving procedure. Surgical mortality for aorto-iliac resection or bypass varies between 2 and 4 per cent. The surgical mortality for operation on the superficial femoral artery is insignificant. It is up to the physician, therefore, to determine that the patient's general condition is satisfactory for operation. It is also up to the physician to be sure by means of proper arteriographic studies that the segment of obstruction is short enough to make operation feasible and that the distal arteries are patent. It is up to the patient to decide whether his symptoms of intermittent claudication are troublesome and incapacitating enough to warrant the risk, expense and inconvenience of a major operation.

Surgical Sympathectomy.—In spite of the recent dramatic developments in the field of direct arterial surgery, sympathectomy still has an important role in the management of chronic occlusive arterial disease. In selected cases, when ischemia of the skin of the feet is the major problem as demonstrated by postural color tests, lumbar sympathetic ganglionectomy is beneficial since it tends to increase collateral circulation although it in no way alters the basic pathology of the disease. Surgical sympathectomy is a useless procedure when irreversible gangrene is already present. It is probably equally useless when ischemia of the skin is minimal. Most patients with intermittent claudication derive no significant benefit from lumbar sympathectomy since the vasodilatation that results from it occurs primarily in the skin and not in the muscle. Consequently, intermittent claudication alone is not an indication for lumbar sympathectomy. It is helpful prophylactically when ischemia seems to be progressing to the point of ulceration or impending gangrene. It is also helpful in hastening the healing of ischemic ulcers already present, and it frequently leads to improvement of rest pain. Surgical sympathectomy should never be undertaken as an emergency procedure but should follow a period of more conservative management.

Alcohol Sympathetic Block.—For patients whose general condition might make surgical sympathectomy hazardous, effective chemical sympathectomy can be obtained with minimal risk by expert injection of the lumbar paravertebral ganglia with absolute alcohol.[9] This is usually done with the patient in a prone position and under light, sodium pentothal anesthesia. After roentgenograms have been made to assure accurate placement of the needle, approximately 4 cc. of absolute alcohol is injected slowly around the second or second and third lumbar ganglia. Approximately 3 per cent of the patients experience distressing somatic neuritis for several weeks after the block, presumably due to accidental injection of the alcohol around somatic nerve roots. Adequate sympathectomy as determined by sweating tests can be achieved for about 65 per cent of patients with this technic. The sweating defect persists for from six months to more than five years after injection.

Amputation.—When ischemic lesions become irreversible, amputation should not be delayed unnecessarily. However, a word of caution is pertinent: Many times amputations for lesions of thromboangiitis can be conservative and much of the limb preserved if infection and pain can be controlled and if the physician and patient are willing to delay amputation until collateral circulation can be improved by conservative treatment. In atherosclerosis obliterans, on the other hand, amputation of toes or even transmetatarsal amputations are usually doomed to failure. Ill-advised attempts at conservative amputation for patients with atherosclerosis obliterans usually lead to prolonged convalescence and predispose to numerous complications.

It is, of course, desirable to preserve the knee joint if this is at all feasible, since patients are better able to use a prosthesis if the knee joint is intact. Indications for amputation below the knee have been formulated by Kelly and Janes[10] after reviewing several hundred cases. Amputation below the knee is likely to succeed if the femoral pulse is open and if there is no history of recent sudden arterial occlusion. It should be noted, however, that the presence of a popliteal pulse is not mandatory. A knee joint that is badly diseased should not be preserved, of course, and it is foolish to risk nonhealing below the knee if there is no possibility that the patient can ever use a prosthesis. The status of the circulation in the calf and the probabilities of healing below the knee often can be evaluated best by the surgeon when he makes an incision through the calf muscles. If bleeding is poor, amputation at this site should not be attempted.

COMMENT

It is apparent from this presentation that the treatment of occlusive arterial disease is palliative and often ineffective because it does not get at the basic cause for the disease. The medical treatment of ischemic lesions or the surgical bypassing of occluded segments of arteries does not prevent progression of atherosclerosis in other sites. Physicians must not be content with developing newer surgical technics which can at best only deal with isolated complications of a generalized disease. Rather we must redouble our efforts to discover the etiologic factors operating in atherosclerosis, for only then will we be able to manage it intelligently and prevent its complications.

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Peptic Ulcer

Choice of Procedure in Operative Treatment

RUSSELL J. CRIDER, M.D., AND BEN L. NEUBEISER, M.D., *St. Charles*

THE SURGICAL TREATMENT of benign peptic ulcer, although in most instances gratifyingly successful, occasionally results in a gastric crippled patient with a healed ulcer, but little better off than when he had an active ulcer. This may happen regardless of the type of procedure used as none are perfect. Extensive studies show, although reports vary somewhat, that there are several procedures which gives comparably successful results.

The attempt to prove a certain procedure successful, by running a series of so-called unselected cases, in our opinion, leads to some failures which could be avoided. We believe, after having been guilty of seriesitis, that a careful evaluation of the patient may lead to a better selection of procedure from several effective ones available. Because of personal experience, we will consider the anterior and posterior Polya types of Billroth II subtotal gastric resection, the Billroth I, the vagotomy with pyloroplasty or gastrojejunostomy, and the pyloroplasty or gastroenterostomy alone.

In considering surgery as a form of treatment for duodenal ulcer, it must be remembered that one is dealing with a nonfatal disease, unless hemorrhage or perforation exists. A procedure should not be chosen if it will jeopardize the patient's life. Our criteria for surgery have been repeated medical failure, intractable pain, perforation, hemorrhage, usually repeated on several occasions, and obstruction. When surgery is chosen as a form of treatment, the time and location of the surgeon's training, plus the dictates of the surgical chief, probably are the governing factors in determining the type of procedure chosen. It is surprising how many surgeons use one type of procedure on all patients at all times, and have for many years. We believe that they are in error by so doing.

Such factors as age, habitus, complications, location of the ulcer, temperament of the patient and occupation may influence the choice of the type of procedure to be chosen. An ill-chosen procedure may leave the patient a permanent gastric cripple.

We have used the posterior Polya type of resection extensively. The belief that it gives a higher cure rate is probably unfounded. The various modifications may add something to the results, but basically the physiologic changes are the same. The decrease in absorption of fats, plus alterations in the physiology of digestion, play an important role in the future course of the patient. To the thin, hard working, hard driving farmer, who spends long hours in the field, it becomes almost impossible for him to absorb enough food to maintain his strength and carry on his work if a wide resection has been done. Except for the absence of pain he may be no better off than he was with his ulcer. We have seen farmers who have had to seek less strenuous occupations as a result. This is not only true of farmers, but of any hard working man of the thin nervous type.

With a wide resection, the danger of incapacitating dumping syndrome has occurred much more frequently in the thin nervous type of patient in our experience. The symptoms have been more resistant to treatment in this type of individual.

Contrast this with the obese, frequently hypertensive, type of cream drinker—nervous, eating most of the time. This type of patient is benefited in several ways by a Polya type of resection. The decreased absorption of fats which usually results leads to a loss of weight with its attendant benefits.

We have also had satisfying result with the anterior Polya type of reconstruction in these patients. In most instances, we have used this type of repair when it was technically too difficult to do a retrocolic anastomosis. This is usually due to excess fat deposits in the mesocolon. In our opinion, it seems advantageous in the obese to do a subtotal gastric resection with gastrojejunostomy, either anticolic or retrocolic.

The most physiologic reconstruction following subtotal resection is undoubtedly the Billroth I type of procedure. It would seem to offer better absorption and less postoperative digestive disturbances. The shorter operating time required must also be considered.

We were so impressed by the possibilities that, beginning in 1949, we ran a series of consecutive cases using the Billroth I. The main problem at that time seemed to be the inflammation and fixation of the duodenum, which made the procedure technically difficult and in some instances hazardous. By careful preparation, consisting of gastric suction, with nothing by mouth for three days prior to surgery, careful blood and protein replacement when necessary, and adequate fluid and electrolyte therapy, we were able to do a Billroth I reconstruction with approximately 75 to 80 per cent resection in 41 of 44 consecutive cases of duodenal ulcer. Two had gastroenterostomies, as they were poor risks, and one had an anterior Polya type of repair. Six gastric ulcers were similarly treated during this period.

Our enthusiasm has dimmed somewhat with the passage of time, but the Billroth I, when properly selected, remains one of the most desirable procedures. It was poorly chosen in several of our patients, as we were more interested in proving the point of technical operability than in selecting the procedure to best aid the patient. In spite of this, the cure rate compared favorably with the other types of resection in our hands.

Age is not extremely important—unless the patient is quite young or very old. Usually other factors will also influence the choice of procedure but, generally speaking, we have been hesitant to do resections on the young patient. Compensation is good for the loss of most of the stomach but, in our experience, many young patients with resections either have to be careful or have some difficulty when they eat. Also, the young energetic individual needs good absorption in order to carry on an active existence.

On the other hand, the elderly individual tolerates the resection well. With careful preparation, resection should not be a shocking procedure, and should be well tolerated. In poor risk patients and the very aged, we have had excellent results with simple gastrojejunostomy. Possibly these patients die of other causes before they can develop marginal ulcers.

The complications will influence the choice of procedure to a great extent. A patient who has had repeated hemorrhages from a duodenal ulcer, in our opinion, should be treated by resection with diversion of the food stream away from the duodenum. We have had several patients who had repeated upper gastrointestinal hemorrhages without esophageal varices, or demonstrable ulcer, who have stopped bleeding only after a subtotal gastric resection with gastrojejunostomy.

The time interval between perforation and surgery is important in the choice of procedure. After 12 to 14 hours, in the absence of obstruction, closure of the perforation alone may be the wisest procedure, with definitive surgery reserved until later.

If the time interval is 12 hours or less, we have had excellent results performing the definitive surgery primarily. Most perforations occur in younger individuals, and we have found that bilateral subdiaphragmatic vagotomy with resection of the ulcer, a Finney-Haberer pyloroplasty, and cleansing of the peritoneal cavity have yielded exceptionally good results. The use of the gastrostomy tube works well in these patients. We have had no difficulty with mediastinitis or infectious complications.

The location of the ulcer can be an important factor in the choice of procedure. Most gastric ulcers will heal completely on treatment but, if they do not they should be resected and, if benign, a rather limited resection seems to suffice. The extent of the procedure in carcinoma of the stomach should be decided at the time of exploration on the facts presented by each case individually. Palliative resections have a definite value.

Ulcers in the second portion of the duodenum are best treated by a procedure which will divert the food stream. Kissing ulcers will tend to cause obstruction and a decompressing procedure is wise.

The temperament of the patient is also a factor in choosing the type of surgical procedure to be used. As is often said, "the ulcer is caused by the personality, and surgery will not change the personality." It may also be said that medical treatment will not change the personality and if surgery becomes necessary it should be aimed at curing the patient, in spite of his personality. In the tense, apprehensive, hyperkinetic type of individual, we have had more favorable results using the vagotomy with pyloroplasty, with excision of the ulcer when possible, than with the resection. As has been pointed out before, this type of individual is more prone to develop a dumping syndrome postoperatively.

We have seen two patients with ulcer history and deformity of the duodenum on x-ray who, without having had surgery, have rather typical symptoms of dumping. The surgeon and procedure would receive the blame, I am sure, if surgery were performed. A careful history is important.

The occupation of the patient should be considered. It is notably difficult for a truck driver to adhere to any type of diet or follow a definite schedule. The least interference with his gastric physiology is desirable. As has been pointed out, the ability to absorb adequate food is important in a man who does hard labor and spends long hours. Resections should be avoided whenever possible in such an individual. An understanding of the working conditions and demands of a patient's occupation is essential for his proper treatment.

In our hospital, there has been a definite decrease in the percentage of patients who have needed surgery. We believe this is primarily due to better drugs which are longer acting, more effective and more evenly absorbed.

SUMMARY

This is not a statistical study, but rather a plea for better and more effective use of the surgical procedures available. A careful evaluation of the patient, and choice of procedure, will give him his best chance of cure with a normal gastronomic existence. In order to do this, such factors as age, habitus, complications, location of the ulcer, temperament and occupation of the patient must be considered. These factors have been discussed.

Supervoltage X-Ray Therapy

ROBERT M. JAMISON, M.D., AND THEODORE E. KEATS, M.D., *Columbia*

NEWER DEVELOPMENTS in the field of radiotherapy are concerned with advances in the field of supervoltage.[3] Patients who are candidates for radiotherapy are usually referred to a radiologist who specializes in this mode of treatment. As developments occur it becomes necessary to apprise the referring physician of the advantages and disadvantages of these new tools. It is also necessary for the referring physician to know what is available in the larger medical centers so that he make use of these facilities to his advantage.

X-rays generated above one million volts are in the supervoltage range. X-rays generated in the 200 KVP to 250 KVP are commonly referred to as conventional or orthovoltage x-ray machines.

The development of the Van de Graaff generator gave to the radiologist a compact, flexible x-ray machine operating in the two million volt range. There are certain advantages on supervoltage x-ray therapy which depend on the physical properties of the x-ray beam, and which cannot be achieved by conventional x-ray therapy.[1, 14] The two outstanding properties relate to the following:

(1) *Skin Sparing Effect*—Back scatter which contributes to the skin dose decreases as the kilovoltage increases. There is maximum sparing effect of the skin with therapy above two million electron volts. The maximum reaction (intensities of ionization) is not on the surface of the skin as with conventional x-ray therapy but is 3 to 4 mm. below the surface of the skin for two million volt therapy. It is possible with a two million volt machine to deliver in a course of therapy 5000 to 6000 roentgens in air to a single treatment field without serious skin damage. Therefore, the skin is not the limiting factor in treating with supervoltage as it may be in the lower voltage ranges.[7]

(2) *Improved Depth Dose.*—Supervoltage therapy machines in contrast with conventional machines will deliver a higher percentage depth dose with less discomfort to the patient.[6] The improvement in depth dose with supervoltage therapy enables the therapist to give a course of treatment in less time than with conventional machinery. The integral dose (total body absorption) is reduced due to a decrease in scatter of the radiation. The radiation is more confined to the area under treatment with less irradiation of normal tissue. In treating large fields in the supervoltage range the depth dose distribution inside the tumor is independent of the actual voltage while in the conventional range the size of the field is sometimes increased to obtain an adequate depth dose, with resultant unnecessary irradiation of normal tissue. The practical clinical advantages of supervoltage therapy are summarized in table 1.

ORTHOVOLTAGE	SUPERVOLTAGE
250 KVP	2 MEV
1. Course of therapy 5-8 weeks.	1. Course of therapy may be shortened to 3 to 5 weeks.
2. Moist skin desquamation, at peak of reaction.	2. Mild erythema at peak of therapy followed by dry, rarely moist, desquamation.
3. Healing process after therapy 2 to 3 months.	3. Healing process after therapy 3 to 4 weeks.
4. Skin may become atrophic with telangiectasia with residual edema and induration, occasionally edema of arm.	4. Skin remains soft and pliable without telangiectasia and fibrosis; however a deep fibrosis may develop.
5. Radiation sickness such as nausea, vomiting and fatigue may be prevalent.	5. Radiation sickness seldom occurs.
6. Dysphagia may develop when treating mediastinum due to esophageal mucositis.	6. Esophageal mucositis is uncommon.
7. Drop in blood count is common.	7. Due to lack of bone absorption blood count is not as seriously affected due to smaller dose to marrow.
8. Post radiation fibrosis of lung is common in treating chest lesions.	8. Post-radiation fibrosis of lung is seen less often.
9. The mucositis of intraoral and intravaginal treatment plus skin reaction may cause excessive prolongation of treatment.	9. Intraoral and intravaginal mucositis are less marked and better tolerated.
10. Diarrhea, rectal and vaginal tenesmus are common when treating pelvic carcinoma.	10. Does not create a serious problem with 5000r doses delivered in 30 days.
11. Greater volume of tissue irradiated due to penumbra and back scatter.	11. Total body absorption due to sharper field definition and less penumbra.
12. Marked bone absorption which diminishes the depth dose. Post radiation fractures of the femoral neck are not uncommon.	12. The absorption of bone, muscle and cartilage are the same. Danger of post-radiation fractures are reduced.

There are a few disadvantages of supervoltage x-ray therapy which are of minor importance.

1. Above 4 to 5 million electron volts the relative energy absorption of bone increases; the range of the secondary electrons is enhanced and the dose received by soft tissue in or near bone is increased.[14]
2. The dose to the skin on the opposite side of the treatment field is increased in supervoltage therapy; since a higher percentage of the beam passes on through the patient in contrast to conventional x-ray therapy.
3. The higher the energies of the radiation source the higher is the cost of machines and housing.[13]
4. Decreased biologic effect at higher energies

From the Department of Radiology, University of Missouri Medical Center, Columbia, Mo.

require about 10 per cent higher dose levels to receive a tissue reaction similar to that of conventional x-ray therapy.

Weighing the disadvantages against the advantageous factors of increased depth dose, diminished bone absorption and biologic effect on bone, reduced surface entrance dose, reduced integral dose and systemic effect leads to the conclusion that an optimum generating voltage for supervoltage is probably 2 to 5 MEV.

SOME CLINICAL APPLICATION OF SUPERVOLTAGE

Carcinoma of the Lung.—Post-radiation fibrosis of the lung is minimal after supervoltage therapy and may not develop for from three to six months following therapy. The superior vena caval syndrome secondary to carcinoma of the lung or other mediastinal carcinomas may be palliated and the vena caval obstruction relieved with less side effects and better patient tolerance than with lower voltage therapy. A palliative dose may be delivered in considerably less time than with 200 to 250 KVP machines. A tumor dose of 6000r may be delivered by a supervoltage machine and this dose is considered cancerocidal.[11] It is almost impossible to obtain this dose level with conventional x-ray therapy.

Carcinoma of the Esophagus.—A tumorocidal dose of 5 to 6000r can be delivered to the esophagus with supervoltage without a great amount of discomfort to the patient. Patients with advanced disease may be palliated with relief of dysphagia and obstruction with considerable success. Supervoltage is considered to be treatment of choice of inoperable carcinoma of the esophagus.[16, 17]

Carcinoma of the Head and Neck.—Supervoltage offers better dosage planning in this area. The use of small fields with sharp field margins reduces the possibility of injury to the cervical cord. Larger tumor doses can be delivered through opposing fields without excessive skin damage.[8]

Carcinoma of the Cervix and Uterus.—Larger tumor doses can be delivered with a more uniform distribution to the pelvis and with better skin tolerance and less bowel reaction. Supervoltage is the treatment of choice in patients with stage III and IV carcinoma of the cervix who are not considered candidates for radium application. The entire pelvis may be treated to 5000 or 6000r without prohibitive discomfort to the patient.

Carcinoma of the Breast.—Larger doses can be delivered to the primary and lymphatics with supervoltage than with conventional radiotherapy with less damage to the skin, less depression of marrow and less radiation sickness.[1] Cases which are treated by the McWhirter technic may be treated to higher dose levels without severe tissue injury and with the possibility of improvement in results.[1, 2, 4, 5, 9]

Carcinoma of the Testis.—Carcinoma of the testis may be more easily handled with supervoltage. When irradiating large areas the total absorbed dose due to scatter is less with supervoltage than with conventional radiotherapy. Non-seminomatous tumors of the testis require 5000 r or more for their eradication. It is seldom possible to influence these tumors with conventional machines.[8]

It should be pointed out that the Van de Graaff generator and Cobalt 60 therapy machines are comparable. The operating voltage ranges are about the same, while the clinical results are identical. The development of supervoltage radiotherapy by no stretch of the imagination makes conventional radiotherapy machines obsolete.

It is true that the advent of supervoltage radiotherapy has not produced a striking alteration in survival statistics, but these statistics do not reflect the marked improvement in patient tolerance. In addition, definite treatment of certain forms of cancer can only be achieved with supervoltage radiotherapy.

CONCLUSIONS

Supervoltage radiation therapy permits high dosage treatment of malignancies with marked diminution in patient reaction. This reduction in morbidity permits definitive treatment of certain forms of cancer which could be controlled with difficulty with conventional equipment.

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Case Report

Frequent Multiple Pregnancies

R. MEYER, M.D.; R. C. SCHWARZ, M.D., AND WILLIAM VOGT, M.D., *St. Louis*

MULTIPLE PREGNANCIES have always stimulated interest and curiosity in both medical and lay personnel. It is only natural then that this interest is compounded when a women gives birth to several sets of twins during her reproductive life. In a review of the literature since 1925 only four cases of frequent multiple pregnancies have been reported.[1, 2, 3, 4] It is because of this relatively unusual phenomena as well as her interesting family history that this case is presented.

Mrs. L. K., a 35 year old gravida IX para VII white female, was seen in the obstetrical clinic for the first time since 1953 on March 4, 1959, in the last trimester of her pregnancy. She complained of progressive edema of legs, dyspnea on exertion, orthopnea and fatigability. Because of the marked edema of the lower extremities she was hospitalized. The date of her last menstrual period was unknown.

Physical examination revealed a normotensive, fairly well developed, pale white female. A grade 2 systolic murmur was heard over the aortic area. The McDonald measurement was 35 cm. Abdominal palpation revealed the presence of two infants. There was 4 plus pitting pre-tibial edema. Peripheral pulses were good. Rectal examination revealed the cervix to be 2 cm. dilated.

Past pregnancy record is as follows:

Date	*Place*	*Birth*
(1) April 29, 1941	Alabama	Single
(2) June 16, 1944	Alabama	Single
(3) August 19, 1947	Alabama	Single
(4) January 27, 1950	Alabama	Single
(5) December 16, 1953	Firmin Desloge St. Louis, Mo.	Double Ovum Twins
(6) November 4, 1954		Complete Abortion
(7) October 27, 1955	St. Louis City Hosp. St. Louis, Mo.	Single
(8) September 15, 1957	St. Louis City Hosp. St. Louis, Mo.	Double Ovum Twins

Her family history as given by the patient is also interesting (fig. 1).

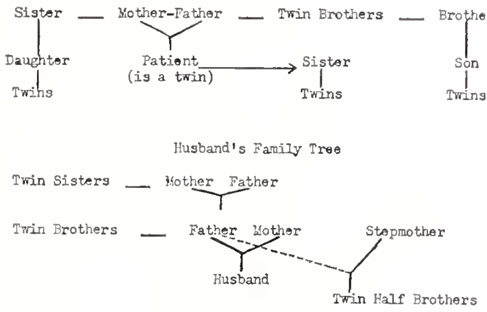

Figure 1

Hospital Course:—Patient's admission laboratory work revealed a hypochromic microcytic anemia and a one plus albuminuria. She was placed on bed rest, low salt diet, diuretic and parenteral iron. She lost 7 pounds by diuresis. The day following admission she began having labor pains. Her blood pressure remained stable and the albuminuria disappeared. That day she delivered single ovum twins (her third set of twins). The twin males weighed 6 pounds 8 ounces and 5 pounds 13 ounces. During her postpartum course she had an endometritis which responded to antibiotics.

SUMMARY

A case has been presented which has two facets of interest: (1) spontaneous delivery of three sets of live, healthy twins, and (2) marked family history of multiple pregnancies.

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4. Taylor, C. E.: Four Generations of Heterosexual Twins With Prepartum Amenorrhea, Brit. M. J. **2**:384, 1931.

MENORAH MEDICAL CENTER CONFERENCE

"From Cortisone to Dexamethasone: A Decade of Experience With Anti-Inflammatory Steroid Hormones" will be the subject at a conference at the Menorah Medical Center, Kansas City, on October 1. Subjects and speakers will be "The Effect of Steroid Hormone on Tissue Reactivity, "Thomas F. Dougherty, M.D., Salt Lake City; "The Relation of Steroid Structure to Metabolic Activity," Grant W. Liddle, M.D., and Herbert A. Burke, M.D., Nashville; "The Use of Steroid Hormones in Dermatology," Leon Goldman, M.D., Cincinnati; "The Use of Steroid Hormones in Allergic States," Samuel Feinberg, M.D., Chicago; "The Use of Steroid Hormones in the Rheumatic Diseases," Albert Grokoest, M.D., New York; "The Use of Steroid Hormones in Hematology," William Harrington, M.D., St. Louis; "The Use of Steroid Hormones in Pulmonary Disease," Hylan Bickerman, M.D., New York; "The Therapeutic Effects and Incidental Side Effects of Steroid Hormones on the Gastrointestinal Tract," John V. Carbone, M.D., San Francisco.

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President's Page

The "dog days" were never meant for doctors. Originated by the astronomer, based on rising of the Dog star at the time the sun rose and which phenomena came during the later part of the summer, at the time that all were tired of the summer months and—in times gone by—when summer diseases were more rampant—all tended to make the "dog days" the lazy days. Not so for the physician for he has always been busy during this period with disease—one of Webster's definitions being "the malignant days."

Ralph Perry, M.D.

There is not the surge of disease in the late summer as in days gone by, but doctors need to be busy now, not only with disease, but with organization. The summer is over and the period during which component societies do not meet has ended and it is time that we concentrate on the work that is before us.

I especially have in mind the committees which I appointed at the time of the annual session. The committee work in the Association is of utmost importance—it is the very basis for the work of the Council and the House of Delegates. The study of problems is done by the committees and their findings give the information on which the other bodies may act. I hope that the committees will soon be working on their individual assignments. The officers of the Association and the office staff are ready at all times to give assistance to this important part of the Association's endeavors.

Ralph Perry

EDITORIALS

American Medical Association to Send More Publications to Members

The *Journal of the American Medical Association*, the *A.M.A. News*, *Today's Health* and one of the specialty publications of the American Medical Association soon will go to every member of the A.M.A.

This action was approved at the June session of the House of Delegates and plans are nearing completion to carry this out.

Formerly members had a choice of the *Journal of the American Medical Association* or one of the specialty journals. Letters will go to members who are receiving a specialty journal informing them that they will also receive the other publications. Letters will go to members receiving only the *Journal* asking them the specialty journal they wish to receive. The specialty journals are: *A.M.A. Archives of Internal Medicine, A.M.A. Journal of Diseases of Children, A.M.A. Archives of Dermatology, A.M.A. Archives of Neurology, A.M.A. Archives of General Psychiatry, A.M.A. Archives of Pathology, A.M.A. Archives of Surgery, A.M.A. Archives of Otolaryngology, A.M.A. Archives of Ophthalmology,* and *A.M.A. Archives of Industrial Health.*

In the past distribution of *Today's Health* has been only by subscription.

Doctors as Nurses

Shortage of nurses during the summer months is an annual seasonal problem at the University of Missouri Teaching Hospital. Most of the campus population is away from Columbia but the hospital continues its usual work. This year hospital officials solved the problem by employing students from the School of Medicine as summer replacement nursing assistants.

Forty-one students, two of them women, who have finished either their first or second year of medicine, are doing ward duty in the hospital on one of the three eight-hour shifts, five days a week. Under supervision of the hospital and Medical Center faculty, they carry on nursing duties that range from making beds to the bedside care of patients and, when fully qualified by education and training, they administer pharmaceuticals.

Work began on the plan last spring in anticipation of the annual problem which, according to Gwilym S. Lodwick, M.D., acting dean of the School of Medicine and acting director of the Medical Center, is caused by the loss of some registered nurses between the regular sessions of classwork. This is especially true because many of the registered nurses are wives of students who leave the campus for the summer. Dr. Lodwick, with the advice of the faculty, initated the plan.

It is reported that the plan worked out excellently as the students like it because in addition to having a summer job, they are learning the nurse's side of medical care and are getting a wider knowledge of hospital procedure; other staff members like the plan for they are relieved of an overload of work, and patients like it for they get some extra attention from nursing assistants who are anxious to make good on the job. In favor of the program, the medical students had already been selected for scholastic standing and ability and all had had four years of premedical work and had accepted an educational program requiring application and hard work. In enlisting the students it was pointed out to them that they were not being employed as doctors' assistants but would be nursing assistants and would be under supervision of the head nurse in the areas to which they were assigned.

Preliminary to starting their summer jobs, the students were divided into first and second year students since the second year students had had training in pharmacology and other second year subjects and could be assigned more responsibility. All took an intensive course in nursing procedures, each group attending a two-hour session twice a week for six weeks just before the winter session ended in June. The first two days in their nursing assistants' jobs were spent in orientation.

New Medical Indexing

Beginning in January 1960 a new program for the indexing of medical literature will be instituted. The "Current List of Medical Literature" now published by the United States Public Health Services' National Library of Medicine in Washington and the "Quarterly Cumulative Index Medicus" compiled by the American Medical Association will be combined and enlarged in a publication to be called "Cumulative Index Medicus." The new index will include currently published medical periodicals which have not been covered in the past. It is estimated that 220,000 articles will be indexed annually.

The new system will use a camera type mechanism capable of photographing text material at the rate of 230 cards per minute. The A.M.A. will publish annual cumulated volumes of the new index, using cumulative copy in the form of film negatives prepared and furnished by the National Library of Medicine.

Musings of the Field Secretary

On Tuesday, June 30, Dr. Paul Whitener, Councilor of the Fourth District, and I traveled out to Washington to attend a noonday meeting of the Franklin-Gasconade-Warren County Medical Society. This was a signal occasion high-lighting the successful completion of one of the societies most important projects undertaken for 1958-1959.

This project was the sponsorship of the 13th Annual National Association of American Physicians and Surgeons Essay Contest for high school students. The local society contacted all of the high schools in the three counties; namely, Franklin, Gasconade and Warren, furnishing details and package libraries for those students wishing to enter the essay contest.

A choice of two topics was given to each student wishing to enter the contest. These topics were, "The Advantages of Private Medical Care" or "The Advantages of the American Free Enterprize System." The Franklin-Gasconade-Warren Medical Society set aside $200.00 as prize money with $100.00 as first prize and on down to $10.00 for the fifth prize for the essays. Some 40 essays by high school students in the three counties were submitted to a committee of the medical society for judging. The committee selected what they considered the five best essays, and these five received the prizes as indicated. The top three essays selected by the committee were forwarded to Dr. T. L. Dwyer, Mexico, the Missouri state essay chairman, for the A.A.P.S. The final judging of these essays as well as those from students of other states was made by the national headquarters of the A.A.P.S. in Chicago.

Dr. Dwyer presented the awards.

All three essays submitted by the Franklin-Gasconade-Warren Society were national prize winners. One won tenth prize and the other two won certificates of meritorious achievement. It is my understanding that this is the first time that anyone from Missouri has won one of the national essay prizes offered by the Association of American Physicians and Surgeons Freedom Programs, Inc., in the 13 years of the contest's existence.

Dr. Dwyer, the essay chairman for Missouri, was present at the meeting to present the awards to the three students with the winning essays. He gave a brief talk complimenting the Society upon the outstanding job done in the promotion of the essay contest in the local area. He then officially presented a check from the Association of American Physicians and Surgeons in the amount of $75.00 to Miss Lynn Waggoner and certificates of meritorious achievement to Miss Doris Elaine Beal and Mr. James Wilkinson, all students from the Sullivan (Missouri) High School, who were the three essay contest winners.

Miss Waggoner placed tenth among the 14 national prize winners. She wrote on "The Advantages of the American Free Enterprise System." In his remarks, Dr. Dwyer also stated that all county and state medical societies and their auxiliaries are invited to sponsor similar A.A.P.S. essay contests for high school students for 1960.

Following the completion of this part of the program the meeting was turned over to Fred Handler, M.D., pathologist, Jefferson City, who gave an interesting and informative discussion on "Staphylococcal Infections—Hospital Variety."

Dr. Handler presented the scientific program.

Dr. Paul Whitener was introduced as the new Councilor for the Fourth District of the State Medical Association. He reported briefly on matters considered at the recent meeting of the Council of the State Association, and also reported on certain scheduled legislative hearings in Washington.

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News—Personal and Professional

A new cancer registry to be established at the University of Missouri Medical Center will be supervised by **John J. Modlin**, M.D., Columbia.

"Convulsive Disorders" was discussed by **Louis L. Tureen**, M.D., St. Louis, at the University of Tuebingen, Germany, in July.

The Ozark Regional Heart Association has elected **James T. Brown**, M.D., Springfield, president. **Glenn O. Turner**, M.D., was elected vice president.

The Kiwanis Club of Joplin was addressed by **A. E. Upsher**, M.D., Kansas City, at a meeting in July. Dr. Upsher discussed "Lung Cancer."

An educational fund named after the late **Richard T. Odell**, M.D., St. Louis, has been established at the Presbyterian Home for Children at Farmington.

The *Sikeston Standard* carried a story and picture of **Thomas C. McClure**, M.D., Sikeston, on the occasion of his completion of 40 years of practice on July 18.

The Columbia Rotary Club had as speaker at a meeting in June **Gwilym S. Lodwick**, M.D., Columbia.

A 50 year button was presented to **Robert P. Price**, M.D., St. Joseph, at ceremonies at the Masonic Lodge in Triplett late in June.

An essay contest has been established by the University of Missouri as a memorial to the late A. R. McComas, M.D., of Sturgeon. Any student in the medical school may compete by writing on some subject on Missouri medical history. First prize will be $100.

The *St. James Journal* on July 3 carried a picture and story about **A. E. Scott**, M.D., St. James.

Group Hospital Service of St. Louis elected Mr. Eugene F. Williams, Jr., secretary of the St. Louis Union Trust Company, St. Louis, as chairman of the board of trustees at an annual meeting held June 24. He succeeds Mr. Howard F. Baer, president of the A. S. Aloe Company, St. Louis.

Wilfred E. Wooldridge, M.D., Springfield, spoke at the University of Oklahoma Medical School, Oklahoma City, on July 19 at a postgraduate course on fungus diseases about his discovery of an antifungal antibiotic being perfected for use in the treatment of moniliasis, cryptococcosis and histoplasmosis. Dr. Wooldridge has been appointed as a visiting lecturer at the school.

A subcommittee of the committee on tuberculosis of the American School Health Association has been appointed as follows: Drs. **Charles A. Brasher**, Mount Vernon, chairman; **Florence E. MacInnins**, Kansas City; **Glenn O. Turner**, Springfield; **Walter Gray**, St. Louis; **A. J. C. McCallum**, Aurora, and **E. J. Schwartz**, Springfield.

The Mid-Continent Psychiatric Association will hold its 12th annual session at Holiday Inn Hotel, St. Louis, on September 18 to 20.

Officers elected in June by the St. Louis Society of Anesthesiologists are **Harry C. Sammons**, M.D., Kirkwood, president; **Donald J. Dickler**, M.D., St. Louis, vice president; **Jean J. Merz**, M.D., Frontenac, treasurer, and **Roy E. Boggs**, M.D., St. Louis, secretary.

Groundbreaking ceremonies of the Madison Memorial Hospital, Fredericktown, were held on July 12. **Ben M. Bull**, M.D., Ironton, attended on invitation to represent the Missouri State Medical Association.

A resolution was passed by the American College of Chest Physicians encouraging the formation of committees on tuberculosis by component medical societies and cooperation of these committees with local tuberculosis societies. **Charles A. Brasher**, M.D., Mount Vernon, is governor of Missouri for the College.

At a district medical meeting at Corpus Christi, Texas, on July 10 and 11, **Claude J. Hunt**, M.D., Kansas City, spoke on "Acute Bowel Obstruction" and "Indications for Surgical Treatment of Peptic Ulcer."

A. Lloyd Stockwell, M.D., Kansas City, will preside as president of the South Central Section of the American Urological Association at a meeting in Denver on September 27-30.

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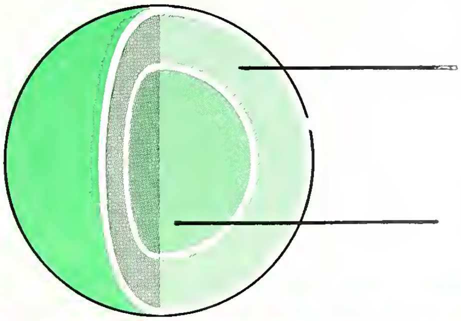

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Hyoscine hydrobromide	0.0033 mg.
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Councilor District News

FOURTH COUNCILOR DISTRICT

PAUL R. WHITENER, ST. LOUIS, COUNCILOR

Jefferson County Medical Society

Carl G. Harford, M.D., St. Louis, spoke at a meeting of the Jefferson County Medical Society on Tuesday evening, July 21, at the Jefferson Memorial Hospital, Crystal City and Festus.

His talk was on the subject of "Rabies." He also discussed the use of tetanus antitoxin in serum-sensitive cases.

John F. Rutledge, M.D., *Secretary*

Lincoln-St. Charles County Medical Society

Richard Yore, M.D., St. Louis, spoke at a dinner meeting of the Lincoln-St. Charles County Medical Society on Tuesday night, June 30, at the Southern Air in Wentzville.

Dr. Yore entered informal discussion following the meeting.

Following the scientific program Dr. Paul Whitener, the new Councilor of the Fourth District, was introduced and asked to speak to the society. He gave a report on the Missouri State Medical Association Council meeting which was held in St. Louis June 20-21. In addition, he discussed the matter of scheduled hearings for July on important bills in Washington.

The evening affair began with a social get together followed by a steak dinner and then the program.

Paul Rother, M.D., *Secretary*

FIFTH COUNCILOR DISTRICT

BYRON M. STUART, BOONVILLE, COUNCILOR

Audrain County Medical Society

Eighteen physicians attended a dinner meeting of the Audrain County Medical Society at the Country Club in Mexico on Tuesday night, June 23.

Dr. Lischer was the speaker.

The audience was attentive.

The evening festivities began with a social hour followed by dinner and then the scientific program.

The discussion of the evening was given by Carl E. Lischer, M.D., St. Louis, who spoke on "Problems in Surgery of the Biliary Tract." This was an interesting and informative presentation eliciting numerous questions from members of the audience.

The next scientific program of the society will be in September.

Ernest S. Gantt, Jr., M.D., *Secretary*

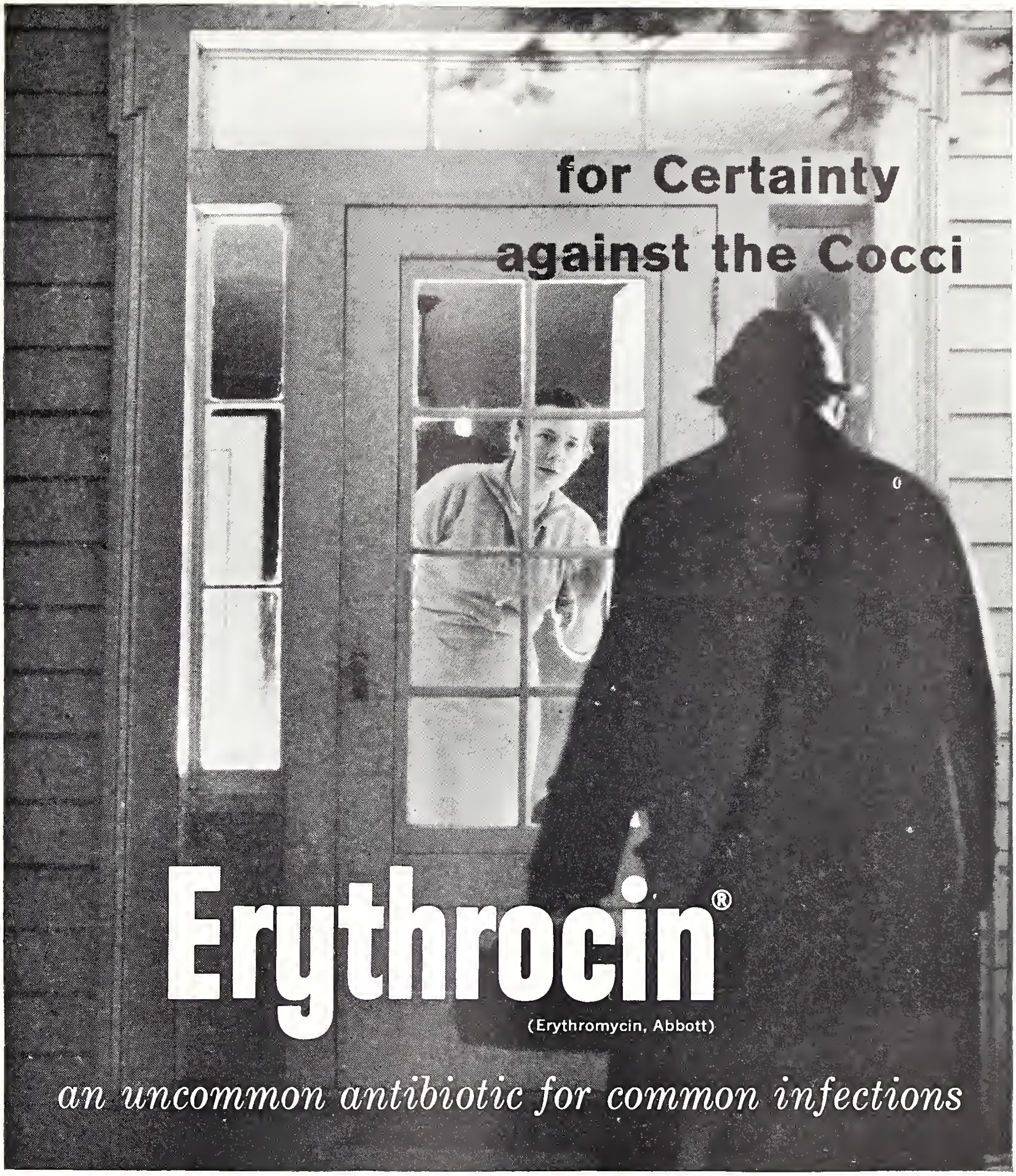
EIGHTH COUNCILOR DISTRICT

W. W. TILLMAN, SPRINGFIELD, COUNCILOR

Greene County Medical Society

The regular meeting of the Greene County Medical Society was held June 26, at the Colonial Dinner House, with 42 members and five guests present.

Dr. Walter W. Tillman, Jr., the President-Elect,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presided in the absence of the President, Dr. J. G. Siceluff.

Special guests were Dr. Paul Redforn, Professor of Botany and Microbiology at Southwest Missouri State College; Mr. Dorsey Love, Executive Director of the Greene County Tuberculosis Society; and Mr. Ray McIntyre, Field Secretary of the Missouri State Medical Association.

Mr. McIntyre reported on current activities of the State Association, with particular reference to a meeting of School Administrators on school-health problems, participated in by Dr. E. J. Schwartz, Chairman of the Missouri State Medical Association's Committee on Infant and Child Care.

Dr. Tillman presided.

On motion by Dr. Moseley, seconded by Dr. Ferguson, the minutes of the May 27 meeting were approved as published in the *Bulletin.*

It was announced that four doctors are needed to help conduct physical examinations of boys entering Camp Arrowhead, the Boy Scout Camp at Marshfield, on the weekends of July 26 and August 2. Two doctors will be needed each weekend.

Dinner preceded the meeting.

Mr. Sam Dickety, representing the Green County Bar Association, has announced that the 2nd Annual Doctor-Lawyer Golf Tournament will be held Wednesday, August 12, at Twin Oaks Country Club.

It was announced that following the meeting there would be a special showing of the film, "Histoplasmosis" for members of the Medical Advisory Committee to the Greene County Tuberculosis Society. All members of the Society were invited to remain for the film.

Dr. Tillman urged all members of the Society to read Dr. Durward Hall's report on the June 8-12, 1959, Annual Session of the American Medical Association which was published in the June *Bulletin.*

Dr. Tillman congratulated Dr. Kenneth Knabb, President of the Southwest Missouri Chapter of the American Academy of General Practice, on the excellent program they presented Sunday, June 21.

Dr. Tillman expressed the Society's appreciation to Dr. Arch Lowe, Jr., and the members of his Golf Tournament Committee, Drs. Ferguson, Gose and Clayton, for the manner in which they handled the 12th Annual Greene County Medical Society Handicap Golf Tournament which was held June 18 at Hickory Hills Country Club.

Informal discussion followed the meeting.

Upon motion by Dr. Max Rosen, seconded by Dr. Thomas Moseley, the President was instructed to express the Society's appreciation to the Auxiliary for their annual picnic held June 23.

Dr. Tillman reported on the June 20-21, meeting of the Council of the Missouri State Medical Association at the Hotel Chase, in St. Louis. Items included expansion of the group insurance programs sponsored by the State Association, a report on legislation affecting the practice of medicine, a meeting of the presidents of hospital staffs and hospital administrators proposed by the Missouri Hospital Association, report on the A.M.A. Annual Session, proposed changes in the meeting place and scheduling of the Annual Session of the State Association, and the functions of the special Committee on Corporate Practice which was authorized by the House of Delegates at the Kansas City meeting.

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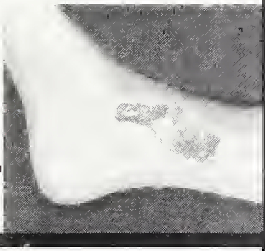

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rapidly spreading
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healed within
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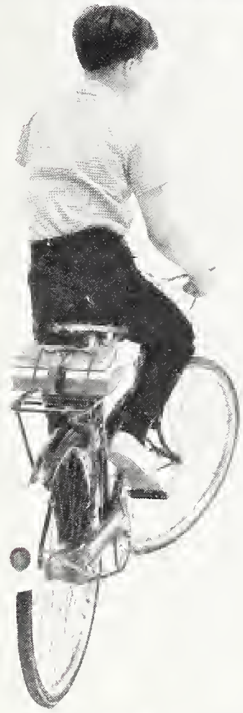

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marked reversal
in 3 days . . .
returned
to school . . .
closure advanced[1]

THROMBOPHLEBITIS
back on his feet
in a week after
recurrent episode[1]

REFRACTORY CELLULITIS
normal routine
resumed after 4 days
of VARIDASE[1]

Dr. Cochran, chairman of the Program Committee for the meeting, introduced Dr. Robert W. Weber, assistant professor of Medicine and microbiology at the University of Kansas Medical Center, Kansas City, Kansas, who discussed "Staphylococcal Infections, a Hospital Problem."

Following a question and answer period, Dr. Tillman expressed appreciation to Dr. Weber for his excellent presentation and to Drs. Cochran, Purcell and Auner for making arrangements for the program of the evening.

Dr. Tillman announced that there will be no meeting during July and August unless a special meeting is required. He reminded Drs. Conrad, Pruitt and German that they are in charge of the September 25 meeting which will be held at the Kentwood Arms Hotel.

There being no further business, the meeting was adjourned.

G. Bruce Lemmon, Jr., M.D., *Secretary*

NINTH COUNCILOR DISTRICT

J. H. SUMMERS, LEBANON, COUNCILOR

Mid-Missouri County Medical Society

A dinner meeting of the Mid-Missouri County Medical Society and the wives of the members was held in the Pine Room of the Greyhound Bus Station, Rolla, on Thursday night, July 23.

A social hour preceded dinner and the program. The scientific presentation for the evening consisted of a panel discussion on "Resuscitation of Infants Following Vaginal and Cesarean Deliveries." The panel participants, all members of the faculty of the University of Missouri School of Medicine, were: Kenneth Keown, M.D., Professor of Anesthesiology; J. S. Roden, Professor of Obstetrics and Gynecology; and Ray Hepner, M.D., Professor of Pediatrics.

This was a most interesting program and was unusually well received by those in attendance.

M. D. Underwood, M.D., *Secretary*

TENTH COUNCILOR DISTRICT

BEN M. BULL, IRONTON, COUNCILOR

Butler-Ripley-Wayne County Medical Society

A dinner meeting of the Butler-Ripley-Wayne County Medical Society was held at the Northwold Restaurant at Poplar Bluff on Tuesday night, July 7.

The scientific program consisted of an interesting discussion on "Acute Injuries of the Hand" by Dr. S. L. Gernstetter, Poplar Bluff. The presentation was accompanied by slides and a movie.

Dr. Gernstetter placed great emphasis on the proper early care of injuries to the hand. His discussion was followed by a number of questions and considerable discussion of the problem presented.

There were 16 members of the Society in attendance at this meeting.

E. T. Hansbrough, M.D., *Secretary*

NEW MEMBERS

Duane, George W., M.D., 9105 Sioux Drive, St. Louis 23. St. Louis County Medical Society.

DuMontier, R. J., M.D., 204 S. Main St., St. Charles. Lincoln-St. Charles County Medical Society.

Gordon, James, M.D., University Medical Center, Columbia. Boone County Medical Society.

Grayson, Richard, M.D., Stephens Bldg., Columbia. Boone County Medical Society.

Jacobs, Walter H., M.D., 751 E. 63rd St., Kansas City. Jackson County Medical Society.

Lansche, W. Edward, M.D., 41 N. Central Ave., St. Louis 5. St. Louis County Medical Society.

Mendelson, David F., M.D., 150 N. Meramec St., St. Louis 5. St. Louis County Medical Society.

Nason, Herbert, M.D., Osceola. West Central Counties Medical Society.

Niedermeyer, Fred P., M.D., Argyle Bldg., Kansas City. Jackson County Medical Society.

Pipes, Keith E., M.D., 1617 E. Swan Circle, Brentwood 17. St. Louis County Medical Society.

Ragland, John E., M.D., Manchester Rd., Ballwin. St. Louis County Medical Society.

Ransdell, Fred, M.D., University Medical Center, Columbia. Boone County Medical Society.

Rubin, Robert, M.D., 7165 Delmar Blvd., St. Louis 30. St. Louis County Medical Society.

Sights, Warren, M.D., University Medical Center, Columbia. Boone County Medical Society.

Wilson, John E., M.D., Platte City. Platte County Medical Society.

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TOXICOSIS
(*e.g.*, uremia, diabetic acidosis, leukemia, carcinomatosis)

MORNING SICKNESS

HYPEREMESIS GRAVIDARUM

OPERATIVE PROCEDURES

MENIERE'S SYNDROME

RADIATION SICKNESS

PSYCHOGENIC PHENOMENA

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From the Medical Schools

UNIVERSITY OF MISSOURI

Appointment of New Dean

Vernon E. Wilson, M.D., acting dean of the University of Kansas School of Medicine, has been appointed dean of the School of Medicine at the University of Missouri.

Dr. Wilson, whose appointment was approved recently at a meeting of the Board of Curators in Kansas City, will assume his duties November 1. He will succeed Dr. Gwilym S. Lodwick, who has been acting dean of the School of Medicine since Dr. Roscoe L. Pullen resigned the deanship on March 24.

Vernon Earl Wilson was born in Plymouth County, Iowa, on February 16, 1915, and was graduated from the high school in Kingsley, Iowa, in 1931. He enrolled in Mount Morris College in Mount Morris, Illinois, in the fall of 1931 with the intention of entering the medical profession, but the closing of that college in the spring of 1932, the economic depression, and family responsibilities forced him to postpone his plans. Having been employed by a transportation company while in college, he continued in that work with the hope of eventually returning to school.

After doing personnel work for a considerable time and later specializing in traffic management, he enlisted in the United States Naval Reserve. He was called to active duty in 1943 and served in the South Pacific during the war period, first in anti-mines warfare, and then briefly in submarine warfare for which he had enlisted. He returned to ship for a short period before being transferred to a minesweeper. Upon being discharged from the USNR in 1946, he decided to carry out his plans to study medicine. He selected the University of Illinois College of Medicine and its College of Pharmacy, both in Chicago, Ill., and earned three degrees, a B.S. in 1950, an M.S. (in Pharmacology) in 1952, and an M.D., also in 1952.

After serving as intern at the University of Illinois Research and Educational Hospital in Chicago from 1952 until 1953, he went to the University of Kansas to be assistant dean of the School of Medicine and assistant professor of pharmacology. In 1957 he was promoted to associate dean of the school. On May 15 of this year, Dr. Wilson was appointed acting dean of the School of Medicine and acting director of the University of Kansas Medical Center, both in Kansas City, Kan., to serve until Oct. 15 during the absence of the dean. His administrative duties at the Kansas Medical Center include participation in the work of several committees. He is chairman of the Admissions Committee, the Student Affairs Committee, and the VA (Veterans Administration) Dean's Committee. He is vice-chairman of the Executive Faculty, co-chairman of the Promotions Committee, and secretary of the Board of Directors of the Student Center and of the Steering Committee of the Executive Faculty. One of Dr. Wilson's important duties has been the personal supervision of the rural preceptorship program of the University of Kansas School of Medicine. In administering this program he has had to visit most of the rural communities of Kansas. Because of the national interest created by this work, Dr. Wilson has been invited to present a paper on "Methods of Preceptorship Programs" at a meeting of the World Conference on Medical Education to be held in Chicago this fall.

Dr. Wilson is active in state and national medical associations. In addition to being associate editor of the *State Medical Journal,* he is a member of the Public Relations Committee of the Kansas Medical Society and the Education Committee and the Publications Committee of the Kansas Academy of General Practice. He was a member of the Planning Committee for the Teaching Institute of the Association of American Medical Colleges and has participated in a number of other programs of that association. He is now assistant secretary of the AAMC (Medical School Survey).

Dr. Wilson is a member of the American Academy of General Practice. His appointment to head the University of Missouri School makes him the first member of the Academy to be named dean of a medical school. He is also a member of the American Medical Association and the American Association of the History of Medicine.

He is author or coauthor of a number of professional papers, including "Effects of Histamine on Renal Hemodynamics," "Metastatic Calcification and Nephrocalcinosis From Medical Treatment of Peptic Ulcer," and his master's thesis, "Effect of Pressor Amines on Renal Glucose Transport."

Dr. Wilson is a member of Alpha Kappa Kappa and Phi Mu Phi, medical and musical social fraternities, respectively, and of the honor societies, Alpha Omega Alpha and Pi Kappa Epsilon. He is married and has two children.

Trips and Talks

On June 25, Dr. Gwilym S. Lodwick, Acting Dean of the School of Medicine and professor and chairman of the Department of Radiology, spoke at a meeting of the Columbia branch of Rotary International on "Cancer."

Dr. Frank B. Engley, Jr., Assistant Dean of the School of Medicine, attended a conference in Salt Lake City and Brighton, Utah, July 1-3 on medical school applicants and students, sponsored by the Association of American Medical Colleges and at-

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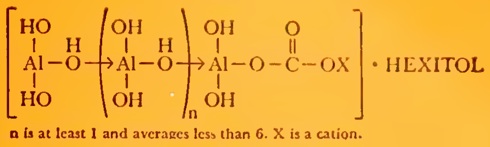
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n is at least 1 and averages less than 6. X is a cation.

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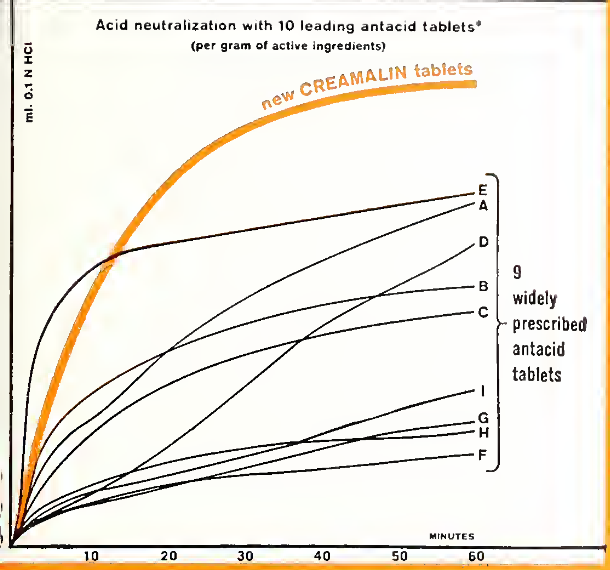
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lets were powdered and suspended in distilled water in a constant temperature tainer (37°C) equipped with mechanical stirrer and pH electrodes. Hydrochloric was added as needed to maintain pH at 3.5. Volume of acid required was rded at frequent intervals for one hour.

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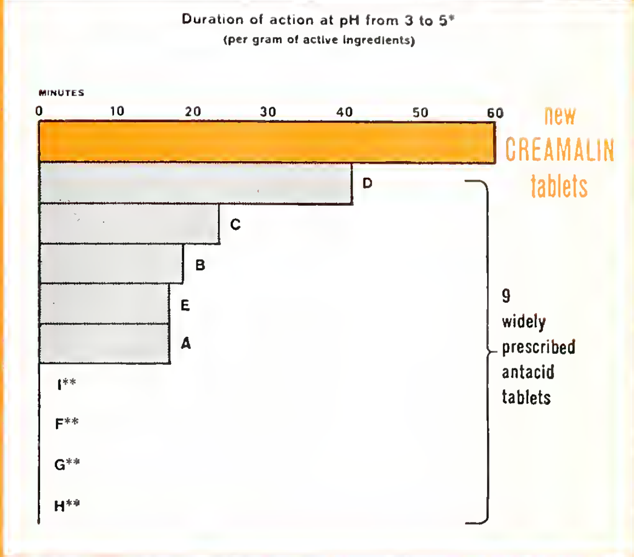
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*Hinkel, E. T., Jr., Fisher, and Tainter, M. L.: A new highly reactive aluminum hydroxide complex for gastric hyperacidity. To be published.

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Dr. D. G. Hall, assistant professor of obstetrics-gynecology, lectured on "Office Gynecology" at a meeting of the Southwest Missouri Chapter, Missouri Academy of General Practice in Springfield on June 21.

Dr. H. M. Haugen, assistant professor of obstetrics-gynecology, attended a seminar on "Biology and Physics of Irradiation on Pelvic Neoplasms" sponsored by the University of Colorado Medical Center and held in Denver, July 4 through 9. Dr. Haugen's participation in the program was his lecture on "The Role of Intravenous Pyelography as a Gynecologic Screening Device."

Dr. Clement E. Brooke, associate professor of pediatrics, attended a summer institute on medical education June 8 through June 19 in Buffalo, New York. The sponsoring groups were the association of American Medical Colleges, The University of Buffalo and the Commonwealth Fund.

Dr. Constantine S. Anast, assistant professor of pediatrics, spoke at a meeting of the Tri-County Academy of General Practice in Washington, Missouri, on July 14 on "Endocrine Disorders of Children."

Dr. James E. Randall, associate professor of physiology and biophysics, attended a summer biophysics conference during the week of June 29 through July 4 at Yale University in New Haven, Connecticut. His attendance at the conference was sponsored by the National Science Foundation.

Dr. Theodore E. Keats, professor of radiology, together with Dr. Lee B. Lusted of the University of Rochester, have just published a book entitled "An Atlas of Roentgenologic Measurement." The book was published by the Year Book Publishers, Chicago.

Gifts and Grants

Dr. C. Thorpe Ray, professor and chairman of the Department of Medicine, has been awarded a supplement of $25,000 to his original grant providing for undergraduate teaching of heart diseases from the Department of Health, Education and Welfare, National Institutes of Health.

Dr. H. E. Brown, assistant professor of anatomy, and Dr. John F. Lowney, assistant professor of medicine, have been awarded a joint grant by the Leukemia Guild of Missouri and Illinois in the amount of $13,800 for "Coordinated clinical and basic science approach to determine the mechanisms operating in the development and therapy of leukemia."

New Appointments

Horace E. Allen, M.D., has been appointed clinical assistant professor of ophthalmology, effective July 1.

Harry Beach Stauffer, M.D., has been appointed clinical assistant professor of ophthalmology, effective July 1.

Paul Edwin Benoit has been appointed instructor in anatomy, effective August 15.

Carlow Perez Trevino, M.D., has been appointed instructor in pediatrics, effective August 1.

Charlotte Marie Brewster, M.D., has been appointed clinical instructor in psychiatry, effective July 1.

Lee Duncan Hanes, M.D., has been appointed clinical instructor in psychiatry, effective July 1.

Robijn K. Hornstra, M.D., has been appointed clinical instructor in psychiatry, effective July 1.

Edwin E. Carter, M.D., has been appointed instructor and third year resident in orthopedic surgery, effective July 1.

Franklin L. Mitchell, Jr., M.D., has been appointed assistant instructor and second year resident in surgery, effective July 1.

Phillip George, M.D., has been appointed assistant instructor and first year resident in pediatrics, effective July 1.

WASHINGTON UNIVERSITY

Appointment

Dr. Paul E. Lacy has been named assistant dean of Washington University School of Medicine, Dean Edward W. Dempsey has announced.

A member of the medical school staff since 1956, Dr. Lacy is assistant professor of pathology. He received the medical degree cum laude and the master of science degree in anatomy from Ohio State University in 1948. He was awarded the degree of Ph.D. in pathology from the Mayo Foundation of the Graduate School of the University of Minnesota in 1955. Dr. Lacy has published several research papers involving insulin and the thyroid gland.

As assistant dean, he succeeds Dr. John C. Herweg, assistant professor of pediatrics, who had held the administrative position since October of 1952.

Dr. Lacy, his wife and two children live at 63 Marshal Place, St. Louis.

Honor Students

Dr. Albert L. Rhoton, Jr., Keokuk, Ia., and Dr. Duane C. Hellam, Phoenix, Ariz., who received their medical degrees in June from Washington University School of Medicine, received highest scholastic honors at the annual award ceremonies in Graham Memorial Chapel on the university campus. Dr. Rhoton was awarded the Alpha Omega Alpha Book Prize for having made the highest four-year academic average in his class; the Prize Fund of the Medical Fund Society for excellence in the study of surgery, and a Sidney I. Schwab Book Prize for general excellence in neurology. Dr. Hellam received the $500 Borden Award for the most meritorious undergraduate research. He won the prize for studies on the mechanism of action of procaine, a local anesthetic. The work was done in the laboratory

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of Dr. Gordon Schoepfle in the department of physiology and the laboratory of Dr. David McDougal in the department of pharmacology. Dr. Richard D. Aach, University City, was awarded the Missouri State Medical Association annual award to an honor graduate; Dr. James R. Benson, Jacksonville, Ill., received the Prize Fund of the Medical Fund Society for excellence in the study of internal medicine. The Jacques J. Bronfenbrenner Memorial Award for the most outstanding work in the field of infectious diseases was awarded Dr. Stanley G. Nathenson, Denver, Colo. Dr. George R. Noren, Excelsior, Minn., received the George F. Gill prize for exceptional scholarship in the department of pediatrics, and a Sidney I. Schwab Book Prize for excellence in neurology was awarded Dr. David L. Winter, Freeport, N. Y. C. V. Mosby Company Book Awards for high general scholastic standing and research achievement were received by Dr. William F. Bridgers, Asheville, N. C.; Dr. Gerald E. Hanks, Fresno, Calif.; Dr. Robert H. Laatsch, Webster Groves; Dr. Morris Reichlin, Toledo, Ohio, and Dr. Richard E. Thompson, Springfield, Mo. Dr. Carl Moyer, Bixby professor and head of the department of surgery, spoke on "Rationalism, Scientific Method and Medicine."

Radiology Congress

Dr. Michel M. Ter-Pogossian, associate professor of radiophysics at Washington University School of Medicine, presented a research paper on "Uranium X-Ray Grids" at the 9th International Congress of Radiology held in Munich, Germany, in July. The paper described a new type of x-ray grid developed at Mallinckrodt Institute of Radiology in the Washington University-Barnes Hospital Medical Center. Rather than the conventional composition of a series of thin lead plates, the new grid utilizes metallic uranium strips permitting x-ray examinations with less exposure of the patient to radiation. Dr. Ter-Pogossian is visiting laboratories in London and Paris engaged in investigations similar to those being carried on at the Radiology Institute.

New Parking Building

The Washington University Medical School plans to erect a 571-car commercial parking garage at Euclid and Audubon avenues, where there is a parking lot now. Cost of project, which will require 10 to 12 months to complete, is estimated at around $75,000. The garage primarily would serve medical school students and patients and visitors to the Barnes Hospital Group but would be open to the general public. Whether the garage, which will have 50,000 square feet of floor space, will be of open-type structural steel or reinforced concrete will depend on the bids received for these two types of materials. The new garage will have a basement, two parking floors and a parking roof. The site is bounded by Euclid avenue on the east, Audubon on the north and abuts the Wabash Railroad right-of-way on the south. On the west side, there will be a bridge which will connect with Renard Hospital. This will be primarily for the use of wheel-chair patients. There will be an elevator and three sets of stairs. Both the entrance and exit will be on Audubon avenue. Cars will enter the garage on straight ramps and leave by a spiral ramp. Customers will park their own cars.

New Grants

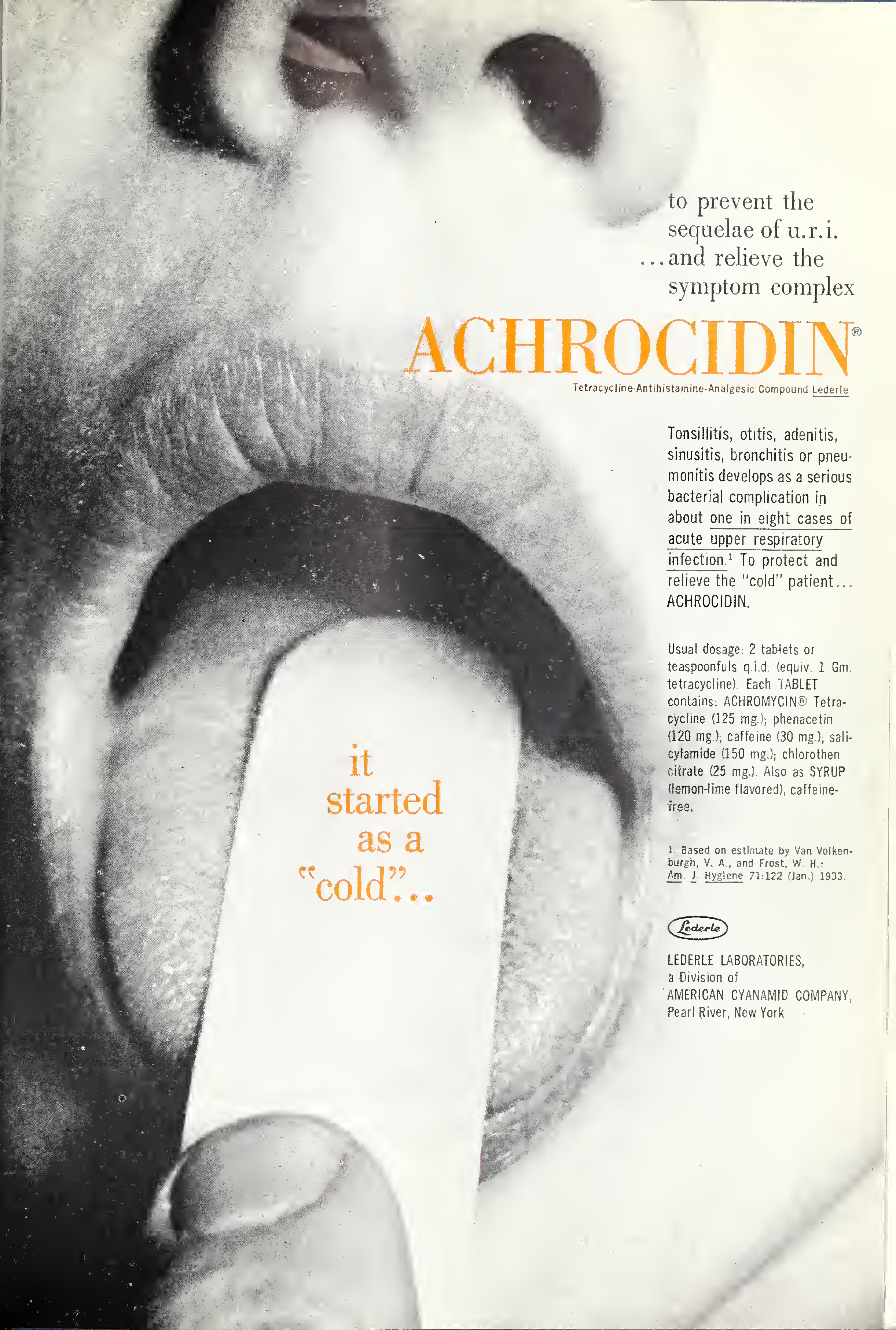
Washington University School of Medicine has been awarded a $21,000 new research grant by the National Science Foundation. The grant will be used for research in the department of biological chemistry, under the direction of Dr. Luis Glaser, assistant professor and Helen Hay Whitney Foundation research fellow in biological chemistry. Studies are being made on the chemical reactions by means of which the body synthesizes connective tissue polysaccharides. A $5,000 grant for research into the causes of leukemia and cancer in children has been presented to the Washington University pediatrics department by the Fern Waldman Memorial Fund. This year the grant will be used for a fellowship for Dr. Ayhan Okcuoglu of Turkey, to finance a month of special study for Dr. Barbara Jones of Washington University at the Oak Ridge Atomic Research Center in Tennessee and to help pay the salary of a laboratory technician. The Fern Waldman Fund has turned over to Washington University $47,205 in its 13 years of existence. Research work authorized by the fund is conducted in the Fern Waldman Laboratory at St. Louis Children's Hospital.

SAINT LOUIS UNIVERSITY

Lectures

Dr. Louis L. Tureen, associate professor of clinical neurology and psychiatry and executive secretary of the section of neurology, visited Europe during the months of July and August. He attended scientific meetings and visited neurological clinics in Austria, Denmark and Germany. He discussed studies of convulsive disorders made at City Hospital in a lecture delivered before the University of Tuebingen in Germany. He also attended the meeting of the International Congress of Psychoanalysis held in Copenhagen July 24 to August 1. While abroad, Dr. Tureen made visits to neurological clinics in Cologne, Hamburg, Freiberg, Munich, Tuebingen and Vienna. While in Hamburg, Dr. Tureen addressed the faculty of the University of Hamburg on neurological disorders.

Dr. John P. Wyatt, professor of pathology, attended a conference on the use of experiments and audiovisual aids in the undergraduate teaching of pathology at Western Reserve University School of Medicine in Cleveland. The purpose of the conference was to encourage the utilization of experi-



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[1] Based on estimate by Van Volkenburgh, V. A., and Frost, W. H.: Am. J. Hygiene 71:122 (Jan.) 1933.

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ments and special teaching aids in the undergraduate teaching of pathology.

Dr. Joseph P. Wack, senior instructor in pathology, attended a meeting of the radiation research society at Hotel Penn-Sheraton in Pittsburgh.

Research papers were delivered by three members of the medical faculty before the International Congress of Pediatrics held in Montreal July 19-25. Participating were Drs. James P. King, director of the department of pediatrics; Dr. Drummond H. Bowden, assistant professor of pathology, and Dr. Leonard Laskowski, assistant professor of pathology.

Grant

Dr. William A. Knight, Jr., associate professor of internal medicine, has been awarded a $60,000 grant for a three year period by the United States Public Health Service for the expansion of a research and training program in gastroenterology. Dr. Knight is director of the program which was organized for teaching and research study of the pancreas, liver, stomach and intestine. Dr. Knight initiated the program in 1949. The grant award will offer opportunities for trainees who have completed at least one year of medical internship and one year of specialized training in medicine. They will be assigned to the section of gastroenterology of the department of internal medicine.

The award will facilitate the expansion of gastroenterology laboratories within the school's department of medicine located at Firmin Desloge Hospital, and also will offer opportunities for medical students in their undergraduate education. Expansion plans currently are being formulated to reconstruct research laboratories for more active and extensive investigation of liver, intestinal and pancreatic diseases. The trainees in the new program will be engaged in research studies in the new laboratories under Dr. Knight's direction. They also will participate in the hospital's outpatient and in-patient clinics and will rotate through the department of radiology and pathology. Dr. Knight's research laboratory at the present time is engaged in research in the field of gastrointestinal diseases, particularly those related to the liver and small bowel.

Summer Research Fellows

Summer research stipends totaling $19,000 supported the summer research investigations of thirty-one medical students who are engaged in a wide range of specialized study for a twelve-week period. The sources of research funds were Allergy Foundation of America; Lederle Laboratories Division, Monsanto Chemical Company; National Foundation; National Science Foundation; Saint Louis University Biochemistry Committee on Grants; Tobacco Industry, and the United States Public Health Service.

Recipients of the summer stipends were Duane Q. Hagen, Shelton F. Lipson, Albert A. Tassi, Richard T. Torchia, Richard E. Cannon, Charles Hoppel, Eugene Gresko, Frederick Guggenheim, Charles B. Jenney, Joseph G. Nouhan, Richard G. Quevy, James Moffat, Richard L. Basford, James F. Clark, Philip Coogan, Thomas F. Eggleston, Willard A. Hauser, Robert Kane, Donald J. Maraist, John C. Morris, Raymond Portu, F. Stanley Seifried, Charles T. Smallwood, Jr., Paul G. Steinbicker, Paul G. Stromsdorfer, Henry N. Wellman, Alfred J. Grindon, James A. Monteleone, Emanuel Rashet, Joseph Reinkemeyer and John F. Sassin.

The majority of the research stipends awarded were for $600. The medical faculty selected the students on the basis of academic record and aptitude for research investigation. The medical students, who are in their freshman, sophomore and junior years of study were engaged in preclinical investigations involving every basic science department within the School of Medicine as well as in the area of clinical experimental medicine.

Their diversified area of study included investigations into allergic diseases, experimental silicosis in animals, coronary circulation, effects of drugs on blood pressure, production of viruses in tissue culture, radioisotopes, the role of metabolism in the production of brain lesions, convulsive disorders, sweating patterns of the human body, identifying characteristics of schizophrenia and many other subjects. The summer research program ended in September.

BOOKS RECEIVED

Obstetrical Practice, by Alfred C. Beck, M.D., Professor Emeritus of Obstetrics and Gynecology, State University of New York, College of Medicine at New York City; Consultant in Obstetrics and Gynecology, Long Island College Hospital, St. Peter's Hospital and Norwegian Hospital, Brooklyn, N. Y., U. S. Naval Hospital, St. Albans, N. Y., Vassar Brothers Hospital and St. Francis Hospital, Poughkeepsie, N. Y.; and Alexander H. Rosenthal, M.D., Clinical Associate Professor of Obstetrics and Gynecology, State University of New York, College of Medicine at New York City; Chief Obstetrician and Gynecologist, Long Island Jewish Hospital, New Hyde Park, N. Y.; Consultant in Obstetrics and Gynecology, Long Island College Hospital; Attending Obstetrician and Gynecologist, Kings County Hospital. Seventh Edition. The Williams & Wilkins Company, Baltimore. 1958. Price $14.00.

Ideals in Medicine, a Christian Approach to Medical Practice, edited by Vincent Edmunds, M.D.; and C. Gordon Scorer, M.D. The Christian Medical Society, Chicago. Price $3.00.

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Missouri Medicine in Review

LEO H. POLLOCK, M.D.

FORTY YEARS AGO

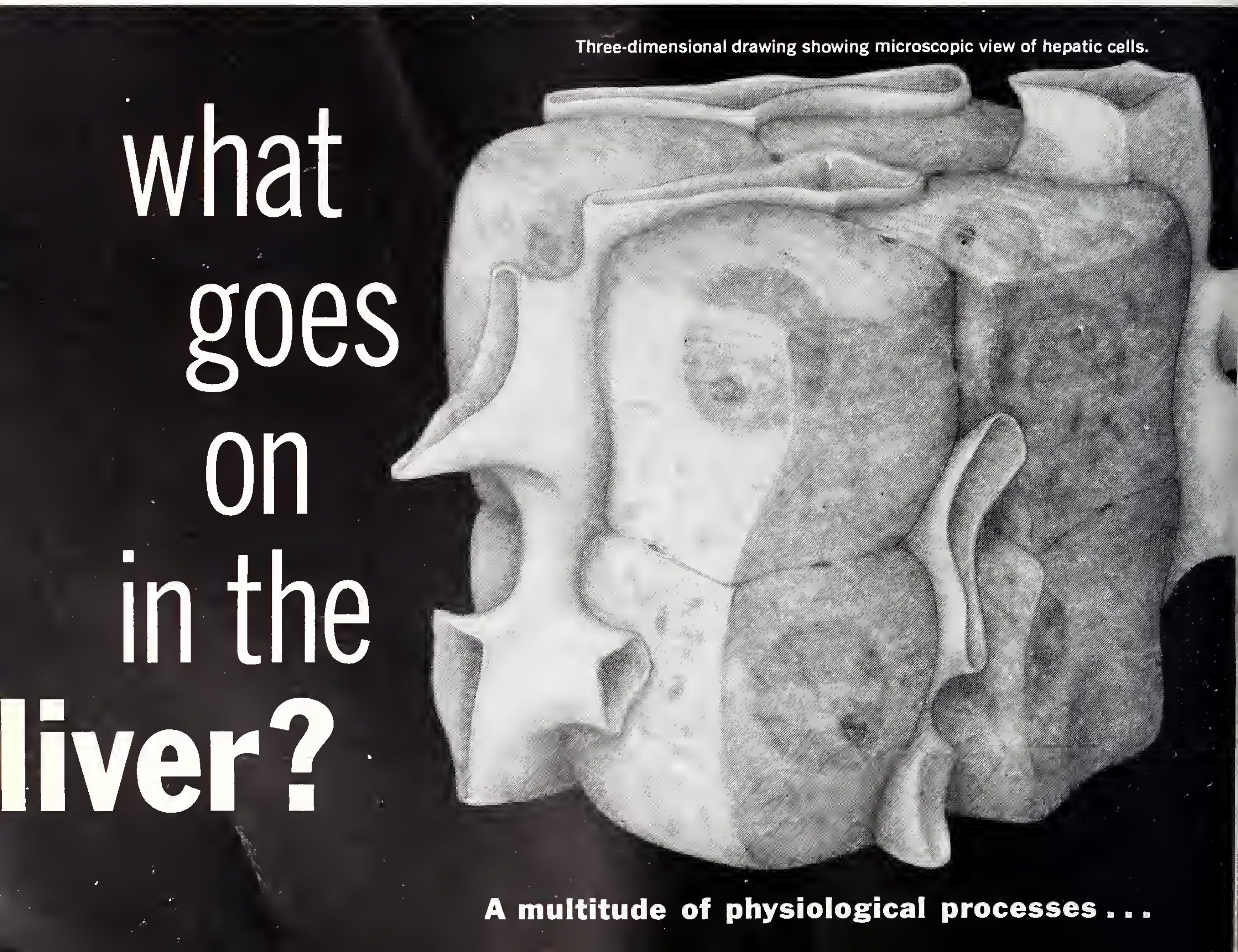
The third survey of hospitals being made under the auspices of the American Medical Association is now well under way. The work in Missouri is in charge of a committee of which Dr. H. E. Pearse, Kansas City, is chairman, the other two members being Dr. G. Canby Robinson, Dean of the Washington University Medical School, St. Louis, and Dr. Charles Hugh Neilson, Professor of Medicine at the St. Louis University School of Medicine. The closer relationship which the hospital now bears to the public in the community which it serves makes it all the more important that the service rendered by it shall be excellent in character.

Leo H. Pollock, M.D.

The American Hospital Association with its allied associations, viz., the American Dietetic Association and the American Hospital Conference, held the twenty-first annual convention in Cincinnati, September 8 to 12. Hospital standardization is the foremost subject considered today. Hospital standardization is so important that it calls for a separate brief consideration. Representatives from the American Hospital Association, the American Medical Association, the American Public Health Association, The American College of Surgeons, the American Association of Medical Colleges, the Association of Military Surgeons, the Surgeon-General's office, the American Nurses Association, and other teaching and educational organizations numbering almost a dozen, organized for the purpose of assisting hospitals to improve their service. This plan includes teaching and training nurses and interns; a scheme for better case records and laboratory study; a more thorough and careful examination of the patient; to encourage hospitals to eliminate the untrained physician and the fee splitter; to develop social service departments; and many other ideas which will make better care of the sick possible.

TWENTY-FIVE YEARS AGO

The Louise G. Wallace Hospital, Lebanon, was dedicated July 1. The building is a fireproof structure with a capacity of thirty beds. The hospital and equipment cost $50,000. Funds for the erection and maintenance were provided for in the will of the late Mrs. Louise G. Wallace.


Three-dimensional drawing showing microscopic view of hepatic cells.
what goes on in the liver?
A multitude of physiological processes . . .

Dr. M. Pinson Neal, Columbia, upon the invitation of the University of Tennessee, Memphis, is serving during the summer quarter as visiting professor of pathology and bacteriology at the University of Tennessee College of Medicine and as acting pathologist to the Memphis General Hospital. Dr. Neal held these same appointments during the summer quarter of 1932.

A plaque in memory of Dr. William Carr Lane, physician and first mayor of St. Louis, and his two grandsons, Dr. William Carr Glasgow and Dr. Frank Adams Glasgow, has been presented to the St. Louis Medical Society.

Dr. W. L. Brandon, Poplar Bluff, has been appointed a member of the State Board of Health to fill the unexpired term of Dr. W. A. Clark, Jefferson City, who died April 11.

TEN YEARS AGO

The Kansas City Southwest Clinical Society will present its twenty-seventh Annual Fall Clinical Conference October 3, 4, 5 and 6.

Melvin A. Casberg, M.D., has been appointed dean of the St. Louis University School of Medicine and assumed his duties August 1. Dr. Casberg graduated from the school in 1936.

Orr Mullinax, M.D., has been appointed superintendent of State Hospital No. 2 at St. Joseph. Dr. Mullinax has maintained his residence in St. Joseph during the time he served as director of the Division of Mental Diseases in Jefferson City.

W. O. Finney, M.D., Chaffee, was elected president of the State Board of Medical Examiners at a meeting on July 31. Edwin C. Schmidtke, M.D., Columbia, was elected vice president, and W. L. Brandon, M.D., Poplar Bluff, secretary-treasurer. The other members of the board are Howard B. Goodrich, M.D., Hannibal; F. T. H'Doubler, M.D., Springfield, and E. C. White, M.D., Kansas City.

Physicians in Missouri are invited to the first annual meeting of the Southwestern Surgical Congress to be held at the Shamrock Hotel, Houston, Texas, September 26 through 28.

The state Hospital Advisory Council for Construction under federal Hill-Burton Aid plan (Public Law 725) reports that $2,213,868.42 of Missouri's federal allotment for the fiscal year, July 1, 1947, to June 30, 1948, which allotment amounted to $2,280,013, has been allocated for the construction of the following facilities: Fifty bed hospital at Perryville, fifty bed hospital at Rolla, seventy-nine bed hospital at Kennett, fifty-six bed hospital at Hayti, additions of thirty-four beds at Nevada and sixty at Kirksville, additions of fifty chronic beds and thirty-four psychiatric beds at Menorah Hospital in Kansas City, two health centers in St. Louis City and a building to house the new health unit at Poplar Bluff. Most of these new facilities are actually under construction.

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Curiosa et Trivia

William B. McCunniff

Before you buy one for a pet, be aware that camel bites are virtually identical to high explosive battle injuries. But if you're still insistent, take comfort in the fact that biting (of people) is confined almost entirely to the male.

Business opportunity: of the twenty or so pairs of Siamese twins who have lived to old age, not one has written an autobiography describing the reaction to this unique situation.

A survey of physicians and pharmacists indicates that the most-needed improvement in relations is more complete prescriptions, particularly in regard to refill information.

And *we* laugh at grubby little pieces of paper handed to one pharmacist: "alk ziers peals" . . . "bottled sicred madneser" . . . "mathala" . . . "elixir perkin hyffrape" . . . "So. Licy Lake Compound." . . .

Or where would you find "sleepin in Allen park"?

Capsule Clinics

- Right ventricular hypertrophy often found in residents of high altitudes is probably related to pulmonary hypertension customarily present in such people. Rotta, A., and Lopez, A., Circulation **19**: 719, 1959.

- The cholesterol-lowering property of nicotinic acid is not shared by nicotinamide. Parsons, W. B., and Flinn, J. H., Arch. Int. Med. **103**: 783, 1959.

- Emergence of antibiotic-resistant S. Aureus was noted in 17 of 92 patients with skin infections treated systemically with tetracycline, erythromycin and novobiocin. Ligingood, C. S., et al., J. Invest. Dermatol. **32**: 485, 1959.

- Griseofulvin, an antifungal substance derived from Penicillium Janczewskii, is ineffective against C. Albicans. Martin, A. R., J. Invest. Dermatol. **32**: 525, 1959.

From Clinical Clippings, the Francis Roberts Agency, Inc.

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WASHINGTON

CRADLE TO GRAVE

"Cradle to Grave" terminology has appeared in a different setting. A "cradle to grave" hospitalization plan was suggested recently at the American Hospital Association meeting. John R. Mannix, executive vice president of the Blue Cross of Northeastern Ohio, warned that unless the service was placed on a national basis, the alternative will be a governmental health system. He said that if that happened it was "unlikely that voluntary hospitals will long survive."

VOLUNTARY INSURANCE FOR FEDERAL EMPLOYEES

A companion bill to S. 2162, the federal employees' health insurance bill, was introduced late in August by Senator Richard L. Neuberger. The bill would give retired federal employees the same health insurance benefits as those proposed for active workers. Senator Neuberger, in explaining the bill covering retired employees, stressed the American Medical Association's encouragement to him to sponsor measures authorizing voluntary health insurance for federal workers on a voluntary basis. He said there were 260,000 retired workers and those disabled while in government service.

In the meantime the House Civil Service Committee has produced a bill that will cost an estimated $90 million less annually than the original S. 2162 and, according to the substitute bill's backers, will provide comparable benefits.

This substitute bill would authorize use of four different health plans, employee organizations plans, some of which are in existence now; service benefits under certain Blue Cross-Blue Shield plans; indemnity coverage, and consumer-controlled clinics. Some of these clinics are operating in California and New York City and in some Middle West and Northwest districts. Federal contribution toward the plan would be 50 per cent. It is estimated that the plan might cover up to 5 million federal workers and their family members.

COST OF MEDICAL CARE

In July the Labor Department's monthly price index indicated a 0.3 per cent rise in medical care cost for June as compared to the previous month. The index figure was 150.6, or 50.6 per cent more than that of the base period of 1947-1949. This figure includes professional services, hospital charges, drugs and supplies. The figure for medical care services alone was 156.1. In reporting this the Washington Report on the Medical Sciences said that it was the greatest of any classification with the exception of "Used Cars" where the increase was 3.5 per cent and that no other categorical constituent could match the uninterrupted ascent, month by month, since 1949. In a later Report, Dr. Franklin D. Yoder, director of the American Medical Association Division of Socio-Economic Activities, was quoted as taking exception and saying that in certain periods between 1949 and 1954 the index declined or remained unchanged. The figure of an increase of 1.2 per cent between March and June of this year was not disputed.

VENDOR PAYMENTS

The Social Security Administration has reported that medical care vendor payments in the several states where it is in force exceeded $30 million in June. The group requiring the most money was that of those receiving old age assistance, accounting for $21.6 million. Aid to dependent children accounted for $4.9 million and benefits to permanently and totally disabled persons was $3.3 million. The blind received $0.6 million.

The rolls in June showed 2,929,000 eligible for aid to dependent children, a decline for the first time in two years, the decline being 0.5 per cent. Those eligible for old age assistance numbered 2,420,000, for the blind 109,000, and for disability 339,000 persons.

OBSTETRIC CARE UNDER MEDICARE

On July 28 the Department of Defense amended the directive concerning obstetric care of women who are pregnant at the time the serviceman husband died. Previously all benefits, including obstetric care, terminated on the death of the serviceman husband. The new specification makes available care of the woman who is pregnant at the time of the husband's death, applying only to antepartum, delivery and postpartum care. For all other types of care, the woman's eligibility under Medicare ceases at the death of her husband. However, she could still be cared for legally under military auspices.

NONSERVICE CONNECTED DISABILITY

Whether or not the English socialized medicine atmosphere influenced the President, he did sign into law a veterans' pension bill raising nonservice connected benefits by 10 billion dollars over the next 40 years.

About 805,000 veterans and 450,000 widows are on the pension rolls now. The new law will add an estimated 26,000 widows and 72,000 veterans.

The President signed the bill while he was at Chequers, England, the country home of British Prime Minister Harold Macmillan. There had been some speculation that the President might veto the bill.

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sured anti-inflammatory effect of low-dosage rticosteroid[1] . . . additive antirheumatic action of rticosteroid plus salicylate[2-5] brings rapid pain lief; aids restoration of function . . . wide range application including the entire fibrositis syn- ome as well as early or mild rheumatoid arthritis

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uch less likelihood of treatment-interrupting de effects[1-6] . . . reduces possibility of residual jury . . . simple, flexible dosage schedule

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bacute or chronic conditions: Initially as above. When sat- 'actory control is obtained, gradually reduce the daily)sage to minimum effective maintenance level. For best sults administer after meals and at bedtime.

ecautions: Because SIGMAGEN contains prednisone, the me precautions and contraindications observed with this eroid apply also to the use of SIGMAGEN.

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Composition

METICORTEN® (prednisone)	0.75 mg.
Acetylsalicylic acid	325 mg.
Aluminum hydroxide	75 mg.
Ascorbic acid	20 mg.

Packaging: SIGMAGEN Tablets, bottles of 100 and 1000.

References: **1.** Spies, T. D., et al.: J.A.M.A. 159:645, 1955. **2.** Spies, T. D., et al.: Postgrad. Med. 17:1, 1955. **3.** Gelli, G., and Della Santa, L.: Minerva Pediat. 7:1456, 1955. **4.** Guerra, F.: Fed. Proc. 12:326, 1953. **5.** Busse, E. A.: Clin. Med. 2:1105, 1955. **6.** Sticker, R. B.: Panel Discussion, Ohio State M. J. 52:1037, 1956.

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SG-J-618

Across Missouri

Population in Missouri increased 285,647, or 7.2 per cent, in the eight year period from 1950 to 1958, according to a report by the Missouri Division of Employment Security on estimates of the 1958 population. The estimated population in 1958 was 4,240,300. This increase varied greatly in different sections of the state, a relatively few of the 114 counties accounting for most of the increase. The majority of counties lost in population, the greatest loss being 20.5 per cent. Counties showing a greater increase than that for the state in general were Platte, Clay, Jackson, Cass, Johnson, Greene, Taney, Pulaski, Phelps, Lincoln, St. Charles, Franklin, St. Louis and Jefferson counties. Counties showing some gain but less than the average for the state are Pettis, Adair, Boone, Audrain, Callaway, Cole, Miller, Laclede, Gasconade, Ste. Genevieve, Madison, Cape Girardeau, Butler and Newton counties.

When the Landrum-Griffin (Labor) Bill was substituted in Congress for the committee bill by a vote of 229 to 201 in August, the voting by Missouri Congressmen was: For Landrum-Griffin, Representatives Clarence Cannon, Thomas B. Curtis, William R. Hull, Jr., and Paul C. Jones. Those voting against were Representatives Richard Bolling, Charles H. Brown, A. S. J. Carnahan, Frank M. Karsten, Morgan M. Moulder, William J. Randall and Mrs. John B. Sullivan. Four of the Congressmen took advantage of the opportunity to vote on both sides of the issue by joining the four Congressmen who voted for the Landrum-Griffin bill when the issue was decided later by voting for it on final passage. The Congressmen who voted on both sides were Representatives Brown, Carnahan, Moulder and Randall.

State taxes in the nation amounted to 15,831 million dollars during the fiscal year that ended last June 30. This is in addition to approximately the same amount in local taxes and 80 billion dollars in federal taxes. Missouri showed an increase of 9 million dollars, going from 280 million in the fiscal year ending June 30, 1958, to 289 million in the last fiscal year. This amounts to $67.76 per capita. The amount in the whole country in state taxes was nearly a billion dollars higher than in the previous year and double the amount collected in 1950.

In only Minnesota, Nebraska and Oregon did state taxes show declines, and these were moderate. California taxes increased by 139 million dollars and New York by 85 million.

Income taxes did not account for the greatest increases, these being from general sales and gross receipt levies. Sales taxes on motor fuels was up 4½ per cent from the previous years. Other sources of income from taxes were from motor vehicle licenses, corporation income, tobacco products, alcoholic beverages and state property taxes.

The first Midwestern Regional Conference of the Council of State Governments to be held in Missouri convened in Kansas City on August 31. Represented were the legislative and executive branches of government in North Dakota, South Dakota, Nebraska, Kansas, Iowa, Minnesota, Wisconsin, Illinois, Michigan, Indiana, Ohio and Missouri.

A new sign has appeared along the highways in Missouri. It reads: "$25 to $500 fine for littering highways." The "litterbug" law was passed by the recent legislature and became active on August 29. Dumping trash along the highway has been a misdemeanor for years but there has been no range of fines until the recent law. It is estimated that it costs the state an average of $28.11 a mile to remove litter along the highways. And the highways in Missouri measure close to 8,500 miles. Aside from the money that may be saved if people heed these warning signs, and the money made by fines to those who do not heed, litter has never been conducive to health of a community.

Twice as many births as deaths were recorded in Missouri in 1958 according to an estimate by the Division of Health. While all records on births for 1958 have not been compiled, it is expected to approximate the number for 1957 which was well over twice the number of deaths in 1958.

Deaths recorded last year were 47,338, the rate being 11 deaths per 1,000 population. The deaths were divided into 29,000 in metropolitan areas and 18,000 in rural areas. Recorded births in 1957 were 101,287, or a birth rate of 23 births per 1,000 population.

Estimates on the amount of money which the new use tax for Missouri will bring in vary from three to 12 million dollars a year. This is the tax that will be placed on products bought outside of the state for use or consumption within the state—not products brought in for resale. The first return is due on October 15 and will cover the period only through September 30. No real estimate probably can be made until the January 15 return is made, which will include October, November and December.

provides therapeutic sulfa levels for 24 hours... Highly soluble in acid and alkaline media... rapidly absorbed, producing fast, effective plasma-tissue concentrations sustained for the entire day. Simple, single 0.5 Gm. daily dose minimizes patient dosage confusion. At least equivalent to 4 to 6 Gms. daily of previous sulfonamides. Does not produce renal complications.[1]

with low incidence of sensitivity reactions... KYNEX is extremely low in toxic potential.[2,3] Cutaneous or other objective sensitivity reactions are rare, as demonstrated in a large scale evaluation of clinical toxicity.[2] Also minor subjective reactions are less likely to develop when the recommended dosage is used.[2]

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1. Editorial, New England J. Med. 258:48, 1958.
2. Vinnicombe, J.: Antibiotic Med & Clin. Ther. 5:474, 1958.
3. Sheth, U. K., et al.: Ibid., p. 604, 1958.

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Missouri Academy of General Practice

John F. Pearl, M.D.

Eleventh Scientific Assembly Meets November 7, 8

Saturday, November 7, 10:15 a.m.

SYMPOSIUM ON FRACTURES

Emergency Treatment of Fractures, Earl D. McBride, M.D., Oklahoma City, Clinical Professor of Orthopedic Surgery, Oklahoma University School of Medicine.

The Care of Open Fractures, Richard E. Lord, M.D., St. Louis, Clinical Instructor of Orthopedic Surgery, St. Louis University School of Medicine.

Management of Fractures of the Forearm, H. R. McCarroll, M.D., St. Louis, Associate Professor of Clinical Orthopedic Surgery, Washington University School of Medicine.

The Management of Trauma in Relation to Permanent Disability, Earl D. McBride, M.D., Oklahoma City.

Panel Discussion.

SYMPOSIUM ON HEMATOLOGY

Patho-Physiology and Treatment of the Megaloblastic Anemias, Richard H. Vilter, M.D., Cincinnati, Director, Department of Internal Medicine, University of Cincinnati College of Medicine.

Treatment of Chronic Lymphocytic Leukemia, Wayne R. Rundles, M.D., Durham, Professor of Medicine, Duke University School of Medicine, Chief of Hematology Laboratory.

Idiopathic Thrombocytopenic Purpura, Edward H. Reinhard, M.D., St. Louis, Professor of Medicine and Consultant in Oncology to the Department of Radiology, Washington University School of Medicine.

What Does a Low Hemaglobin Mean? R. O. Muether, M.D., St. Louis, Associate Professor of Internal Medicine, St. Louis University School of Medicine, and Director of Clinical Laboratories, St. Louis County Hospital.

Some Effects of Nutritional and Hematological Disorders on Cardiovascular Function, Richard W. Vilter, M.D., Cincinnati.

Diagnosis and Treatment of Multiple Myeloma, Wayne R. Rundles, M.D., Durham.

Panel Discussion.

Sunday, November 8, 9:00 a.m.

SYMPOSIUM ON MEDICINE

Coronary Heart Disease in Different Populations, Ancel Keys, Ph.D., St. Paul.

The Recognition of the Aerophagic Syndromes, James L. A. Roth, M.D., Philadelphia, Professor of Clinical Gastroenterology, Graduate School of Medicine, University of Pennsylvania.

The Management of Chronic Renal Disease, C. Thorpe Ray, M.D., Columbia, Professor and Chairman, Department of Medicine, University of Missouri School of Medicine.

Medical Education for General Practice, Vernon E. Wilson, M.D., Columbia, Dean, University of Missouri School of Medicine.

The Diet and Blood Lipids, Ancel Keys, Ph.D., St. Paul, Professor, University of Minnesota School of Public Health and Director, Laboratory of Physiological Hygiene.

Individualized Selection of Peptic Ulcer Operation, James L. A. Roth, M.D., Philadelphia.

Panel Discussion.

SYMPOSIUM ON OBSTETRICS

Fibrinogen-Fibrin Conversion Syndrome, C. Paul Hodgkinson, M.D., Detroit, Chief of the Department of Gynecology and Obstetrics, Henry Ford Hospital, and President-elect, American College of Obstetricians and Gynecologists.

Childbirth Without Fear of Interference, Clyde L. Randall, M.D., Buffalo, Professor, Obstetrics and Gynecology, University of Buffalo School of Medicine.

Management of Postpartum Bleeding, Carl Joseph Dreyer, M.D., St. Louis, Senior Instructor in Gynecology and Obstetrics, St. Louis University School of Medicine.

Hormone Treatment of Threatened Abortion, C. Paul Hodgkinson, M.D., Detroit.

Prolonged Labor, David G. Hall, M.D., Columbia, Assistant Professor, Department of Obstetrics and Gynecology, University of Missouri School of Medicine.

Placentas We Should Know—and Fear, Clyde L. Randall, M.D., Buffalo.

Panel Discussion.

Component Societies in Affiliation With the Missouri State Medical Association

County	District	President	Address	Secretary	Address
Andrew	1	V. R. Wilson	Rosendale	M. L. Holliday	Fillmore
Audrain	5	Harold D. Lankford	Mexico	Ernest S. Gantt	Mexico
Barton-Dade	8	Thomas W. Carroll	Lamar	Herbert M. Arnold	Lamar
Benton	6	T. S. Reser	Cole Camp	James A. Logan	Warsaw
Boone	5	Leroy Miller	Columbia	Joseph E. Flynn	Columbia
Buchanan	1	George W. Forman	St. Joseph	William B. Rost	St. Joseph
Butler-Ripley-Wayne	10	T. E. Ruff	Poplar Bluff	E. T. Hansbrough	Poplar Bluff
Callaway	5	A. K. Baur	Fulton	Vernon B. Jackson	Fulton
Camden	5				
Cape Girardeau	10	Paul Wolff	Cape Girardeau	G. M. Hoxworth	Cape Girardeau
Carter-Shannon	9	H. D. Rollins	Winona		
Chariton-Macon-Monroe-Randolph	2	C. C. Weger	Keytesville	Josephine Baker	Moberly
Clay	1	Reinhardt D. Dwyer	North Kansas City	James E. McCormick	Kansas City
Clinton	1	W. B. Spaulding	Plattsburg	J. P. Mabrey	Plattsburg
Cole	5	Joseph S. Summers, Jr.	Jefferson City	H. O. Loyd	Jefferson City
Cooper	5	Vernon D. Friedrichs	Pilot Grove	T. C. Beckett	Boonville
Dallas-Hickory-Polk	8	D. C. McCraw	Bolivar	C. H. Barnett	Bolivar
Dunklin	10	Leo J. Benson, Jr.	Kennett	E. L. Spence	Kennett
Franklin-Gasconade-Warren	4	Paul A. Brenner	Owensville	William Richardson	Union
Grand River Medical Society (Caldwell-Livingston-Carroll-Grundy-Daviess-Harrison-Linn-Mercer-DeKalb)	1	E. W. Allen	Carrollton	E. A. Duffy	Trenton
Greene	8	J. G. Siceluff	Springfield	G. Bruce Lemmon, Jr.	Springfield
Henry	6	Richard King	Clinton	R. S. Hollingsworth	Clinton
Howard	5	W. C. Allen	Glasgow	W. A. Bloom	Fayette
Jackson	7	Harold L. Gainey	Kansas City	Edward G. Kettner	Kansas City
Jasper	8	Irwin T. Craig	Joplin	David Allen	Joplin
Jefferson	4	Robert H. Donnell	Crystal City	John F. Rutledge	Crystal City
Johnson	6	Keith D. Jones	Warrensburg	T. Reed Maxson	Warrensburg
Lafayette-Ray	6	Walter E. Koppenbrink	Higginsville	Thomas B. Cook	Richmond
Lewis-Clark-Scotland	2	J. R. Bridges	Kahoka	P. W. Jennings	Canton
Lincoln-St. Charles	4	E. O. Damron	Elsberry	P. H. Rother	St. Charles
Marion-Ralls-Shelby	2	Julius Well	Palmyra	J. H. Walterscheid	Hannibal
Mid-Missouri County Medical Society (Phelps-Crawford-Dent-Pulaski-Maries-Laclede)	9	H. W. Carrington	Lebanon	M. K. Underwood	Rolla
Miller	5	W. L. Allee	Eldon	Carl T. Buehler	Eldon
Mineral Area County Medical Society (St. Francois-Iron-Madison-Washington-Reynolds-Ste. Genevieve	10	Marvin T. Haw	Bonne Terre	George L. Watkins, Jr.	Farmington
Moniteau	5	K. S. Latham	California	L. M. Gallagher	California
Montgomery	5	E. J. T. Andersen	Montgomery City	Samuel J. Byland	Wellsville
Morgan	5	Robert R. Lyle	Versailles	Ruth Kauffman	Versailles
Nodaway-Holt-Atchison-Gentry-Worth	1	Edward F. Bare	Tarkio	Charles D. Humberd	Barnard
North Central Counties Medical Society (Adair-Schuyler-Knox-Sullivan-Putnam)	2	Spencer L. Freeman	Kirksville	Paul E. Hilton	Kirksville
Ozarks Medical Society (Barry-Lawrence-Stone-Christian-Taney-Newton-McDonald)	8	Leo T. Taylor	Neosho	A. J. Graves	Mount Vernon
Pemiscot	10	P. J. Aquino	Caruthersville	John K. Duckworth	Hayti
Perry	10	Stanley Legner	Perryville	A. E. McDermott	Perryville
Pettis	6	Thomas J. Hopkins	Sedalia	R. H. Stewart	Sedalia
Pike	2	Charles H. Lewellen	Louisiana	Roger F. Christensen	Louisiana
Platte	1	H. Graham Parker	Platte City	H. C. Thurman	Parkville
St. Louis City	3	Robert B. Bassett	St. Louis	Charles S. Sherwin	St. Louis
St. Louis	4	Robert Kingsland	Clayton	B. Todd Forsyth	St. Louis
Saline	6	E. Lee McCorkle	Marshall	M. E. Roehrs	Marshall
Semo County Medical Society (Stoddard-New Madrid-Mississippi-Scott)	10	John Dernoncourt	Charleston	Thelma C. Buckthorpe	Sikeston
South Central Counties Medical Society (Howell-Oregon-Texas-Wright-Douglas-Ozark)	9	J. L. Spears	Cabool	Rollin H. Smith	West Plains
Webster	8	C. R. Macdonnell	Marshfield	E. G. Beers	Seymour
West Central Missouri Medical Society (Bates-Cass-Cedar-St. Clair-Vernon	6	John M. Cooper	Butler	J. C. Moody	Harrisonville

new hope for fetal salvage

DEL

The results of administering Delalutin before the 12th week of gestation to 82 women with habitual abortion were reported recently by Reifenstein[1] in a compilation of data supplied by 45 investigators. Every patient had experienced at least three consecutive abortions immediately preceding the treated pregnancy. More than 68% of these women were delivered successfully and uneventfully following Delalutin therapy.

Boschann,[2] in a study of pregnancies with threatened abortion, found that:

37% of 73 pregnancies were carried to term without progestational therapy

64% of 42 pregnancies were salvaged by progesterone

83% of 73 pregnancies were salvaged by Delalutin

Eichner,[3] found that in Delalutin-treated women, fetal salvage of infants below term weight (1000 to 2000 gm.) was significan improved. 108 (76%) of 142 babies of t birth weight survived without mothers rece ing progestational therapy, while 16 (100 of 16 babies of this birth weight survived w mothers receiving Delalutin therapy. A co parison study was made of a group repeated aborters treated with Delalut and a group with a similar history treat with bed rest and sedation.[4] Pregnan salvage with Delalutin was twice that of t control group. Delalutin was found to "highly active", well-tolerated and lor acting.

According to Tyler and Olson,[5] "The qualities of prolonged action and relati freedom from local reactions mal [Delalutin] a generally more desirab therapeutic agent for intramuscular u than progesterone . . . ."

DELALUTIN BABIES WHOSE MOTHERS WERE HABITUAL ABORT

Mary Ann Cribben
Garden City, N. Y.

Amy Sue Greenman
Lincolnwood, Ill.

William Peller
Skokie, Ill.

Randy Sinis
Denver, Colo.

Richard Miller
Denver, Colo.

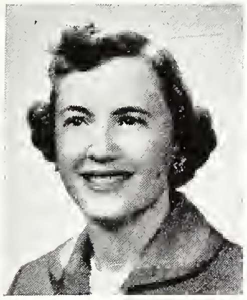
Scott Knudse
Norwich, Vt.

References: 1. Reifenstein, E. C. Jr.: *Annals N. Y. Acad. Sc.* 71:762 (July 30) 1958. 2. Boschann, H-W.: *ibid.*, p. 727. 3. Eichner, E.: *ibid.*, p. 787. 4. Hodgkinson, C. P.; Igna, E. J., and Bukeavich, A. P.: *Am. J. Obst. & Gynec.* 76:279, 1958. 5. Tyler, E. T., and Olson, H. J.: *J.A.M.A.* 169:1843, 1959.

The Woman's Auxiliary

MRS. STANLEY S. PETERSON

"The object of this Auxiliary shall be to extend the aims of the Missouri State Medical Association, which looks to the protection of public health and to advancement of health education; to fulfill such functions as may be needed from it at medical meetings; and all times to stimulate the spirit of co-operation and fellowship through the common bond of friendship"—from the Constitution and By-Laws of the Woman's Auxiliary to the Missouri State Medical Association.


Mrs. Stanley S. Peterson

That is why an auxiliary exists and why we doctors' wives join the auxiliary.

This is the time of year when most organizations are reenlisting old members, and welcoming new ones. All over the state our local auxiliaries are planning coffees, teas, luncheons and dinners for the special purpose of honoring new members, introducing them to old members, and making every effort to help newcomers feel at home in the group.

Last year we reported to National a paid membership of 1,743. Each year we try to increase this number. Since there are 3,870 members of the Missouri State Medical Association, it is easy to see we have a large field of potential members from which to draw.

Many of our auxiliaries, especially the smaller ones, boast 100 per cent membership of doctors' wives in their counties. In other counties, only a few do not belong.

There are thirty-six counties in the state which do not have organized auxiliaries, and in these areas we try to persuade the ladies to become members-at-large of the State Auxiliary.

One of our goals is to vary our auxiliary program to such an extent that there is something to interest every potential member.

For the "leader" we can find a niche as an officer or committee chairman, so that she can constructively use her leadership ability in promoting one of our many projects.

For the "doer" there is the execution of a Civil Defense project, such as home protection exercises, or First Aid classes; helping with Future Nurses Clubs; presenting Safety and Mental Health programs for lay groups.

For the "artistic" member, there are posters to be made for Doctors Day—invitations to membership parties—decorations for meetings—musical programs for the auxiliary, or for nursing home shut-ins.

For the young mother who simply wants a couple of hours of adult companionship, there is the friendly exchange of experiences and ideas when a group of women with so much in common meet together.

When she joins the Auxiliary, a doctor's wife supports it by:

1. Understanding the purpose and objectives of her Auxiliary.
2. Attending meetings.
3. Paying her dues.
4. Accepting the responsibility of an office or chairmanship in her Auxiliary as well as other organizations where the interests of organized medicine can be served.

Often a doctor's wife, when approached to join her county auxiliary, refuses on the grounds of ill health, or being tied down for one reason or another, which would prevent her from attending meetings. While we surely do not encourage mere "dues-paying members," this is one instance where we urge these ladies to join and pay dues, because through their county dues the local auxiliaries accomplish so very much.

One dollar of county dues is sent to National, where it is used to defray expenses of the National office, for the employment of the friendly, able women who are so willing to help us in every way, for materials for our use in promoting our various projects, for part of the expenses of the national officers who travel all over the country giving inspiration and help to our local auxiliaries.

One dollar of county dues goes to the State Auxiliary. It is used for allowances for president and president-elect, for postage and printing, for medical student loan fund, for expenses of chairmen who send information and inspirational letters to county presidents and chairmen.

The balance of a member's county dues is likely to be used to support a nurse's loan fund, or scholarship fund; to honor doctors on Doctor's Day; to present token gifts to program speakers; for benevolent projects; for A.M.E.F. donations; and in many other ways.

A member-at-large in an unorganized county pays two dollars—the national and state dues—and supports Auxiliary activities in this way. She is urged to attend meetings of nearby county auxiliaries, and all state meetings.

Members of the Auxiliary to the Student American Medical Association are a new source of potential membership. When their husbands enter practice, information on the S.A.M.A. auxiliary members is sent to the county auxiliaries at their new locations, so that they may be contacted promptly.

Doctors are requested to encourage their wives to help make Missouri a state where "every doctor's wife is an Auxiliary member."

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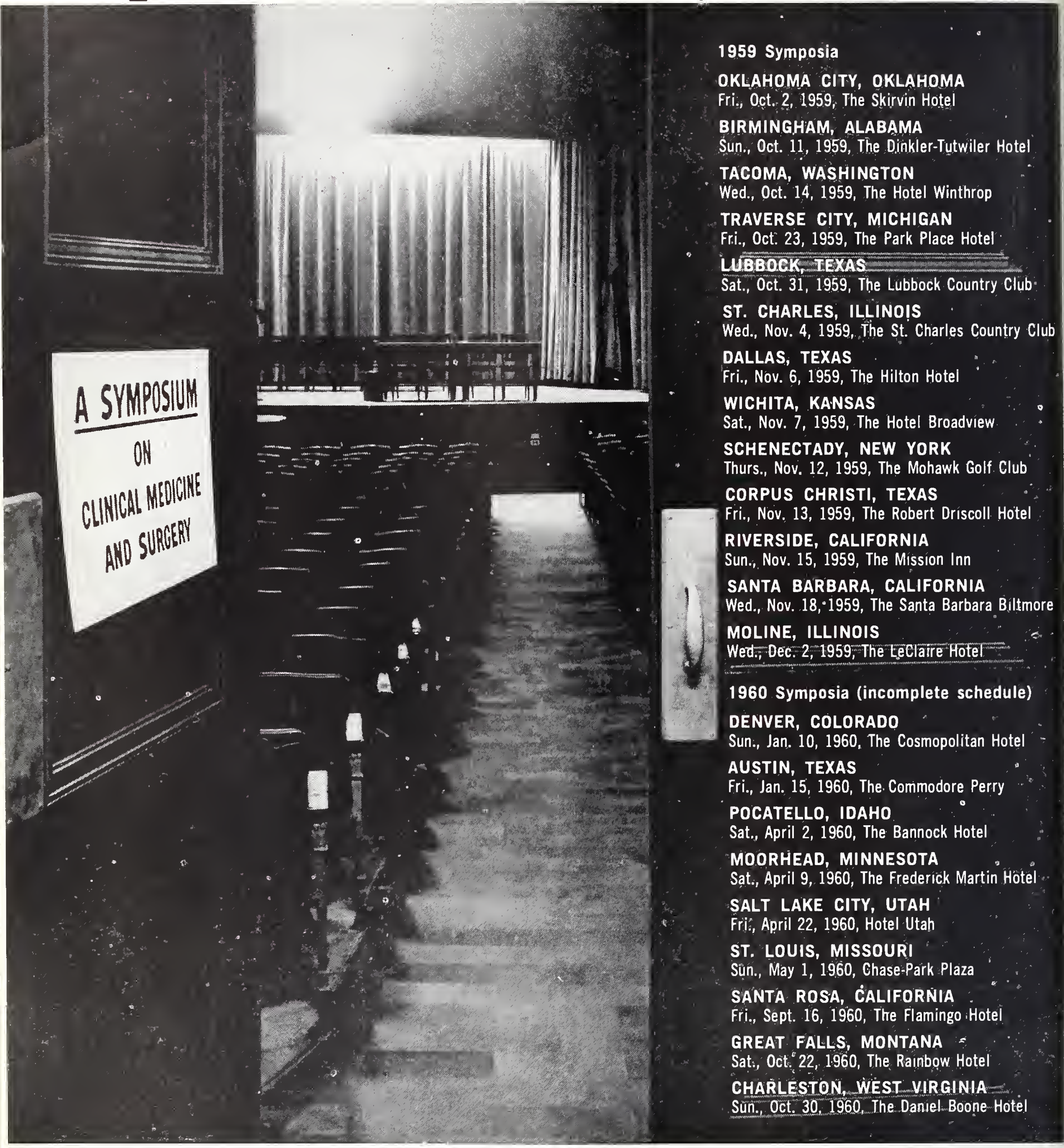

1959 Symposia

OKLAHOMA CITY, OKLAHOMA
Fri., Oct. 2, 1959, The Skirvin Hotel

BIRMINGHAM, ALABAMA
Sun., Oct. 11, 1959, The Dinkler-Tutwiler Hotel

TACOMA, WASHINGTON
Wed., Oct. 14, 1959, The Hotel Winthrop

TRAVERSE CITY, MICHIGAN
Fri., Oct. 23, 1959, The Park Place Hotel

LUBBOCK, TEXAS
Sat., Oct. 31, 1959, The Lubbock Country Club

ST. CHARLES, ILLINOIS
Wed., Nov. 4, 1959, The St. Charles Country Club

DALLAS, TEXAS
Fri., Nov. 6, 1959, The Hilton Hotel

WICHITA, KANSAS
Sat., Nov. 7, 1959, The Hotel Broadview

SCHENECTADY, NEW YORK
Thurs., Nov. 12, 1959, The Mohawk Golf Club

CORPUS CHRISTI, TEXAS
Fri., Nov. 13, 1959, The Robert Driscoll Hotel

RIVERSIDE, CALIFORNIA
Sun., Nov. 15, 1959, The Mission Inn

SANTA BARBARA, CALIFORNIA
Wed., Nov. 18, 1959, The Santa Barbara Biltmore

MOLINE, ILLINOIS
Wed., Dec. 2, 1959, The LeClaire Hotel

1960 Symposia (incomplete schedule)

DENVER, COLORADO
Sun., Jan. 10, 1960, The Cosmopolitan Hotel

AUSTIN, TEXAS
Fri., Jan. 15, 1960, The Commodore Perry

POCATELLO, IDAHO
Sat., April 2, 1960, The Bannock Hotel

MOORHEAD, MINNESOTA
Sat., April 9, 1960, The Frederick Martin Hotel

SALT LAKE CITY, UTAH
Fri., April 22, 1960, Hotel Utah

ST. LOUIS, MISSOURI
Sun., May 1, 1960, Chase-Park Plaza

SANTA ROSA, CALIFORNIA
Fri., Sept. 16, 1960, The Flamingo Hotel

GREAT FALLS, MONTANA
Sat., Oct. 22, 1960, The Rainbow Hotel

CHARLESTON, WEST VIRGINIA
Sun., Oct. 30, 1960, The Daniel Boone Hotel

In cooperation with medical organizations throughout the United States, Lederle continues to offer aid to post-graduate medical education through its Symposium program. Upon completion of the schedule above the number of Symposia presented will exceed 200 since the first meeting, sponsored by the Knoxville (Tenn.) Academy of Medicine eight years ago. Each meeting presents prominent authorities discussing important advances in clinical medicine and surgery. Activities are also planned for physicians' wives.

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Recent Advances in Roentgenology of the Biliary System

LESTER W. PAUL, M.D., *Madison, Wis.*

It has been approximately 35 years since Graham and Cole[2] demonstrated that the contents of the gallbladder could be made radiopaque following the intravenous administration of a halogen containing drug, tetrabromophenolphthalein. Within a year an iodine compound, tetraiodophthalein, was introduced. This could be given orally and within a short time the oral method of cholecystography came into general use and gradually replaced the intravenous technic. The rapid development of cholecystography is attested by the wealth of articles appearing in the literature within a few years. The examination became an integral part of the study of patients suspected of having disease of the biliary tract.

It was stressed from the very first that oral cholecystography was a test of function; of the ability of the gastrointestinal tract to absorb the drug, the liver to secrete it and the gallbladder to concentrate the bile by removing water so that its contents became sufficiently radiopaque to produce a discernible shadow on the roentgenogram. The use of a fatty meal to demonstrate the ability of the gallbladder to contract was considered a significant part of the study. These aspects of cholecystography remain valid today.

PRESENT-DAY CHOLECYSTOGRAPHY

Much of the development during the first two decades consisted in the improvement of technics and in advances in roentgen ray equipment. The first major improvement in contrast media came with the introduction of a phenylpropionic acid derivative (Priodax). Containing a higher percentage of iodine (51 per cent) than previously employed media, denser shadows of the gallbladder could be obtained. Being in tablet form the drug was more pleasant to take and side reactions, particularly diarrhea, were lessened. During recent years other contrast media have become available. These are tri-iodo compounds with an iodine content of approximately 66 per cent. Because of the increased amount of iodine, opacification of the gallbladder generally is greater than with the older media and side reactions are minimal. There are fewer faintly visualized or nonvisualized gallbladders and the need for repeating the test because of equivocal findings has been largely eliminated. Of these media, iopanoic acid (Telepaque) is probably the most widely used and the one that I have given routinely during the last six years. With the usual dose of 3 grams of the drug cholecystography with iopanoic acid still remains a test of function. There must be absorption of it from the gastrointestinal tract, adequate liver function so that it is secreted in the bile, a patent cystic duct and concentration of the bile by the gallbladder. It hardly needs to be mentioned that lack of visualization may be caused by a number of factors totally unrelated to the biliary system such as failure of the patient to take the drug at the prescribed time, vomiting of the drug, accumulation of it in large esophageal diverticula or within the dilated esophagus of cardiospasm, to mention a few. Because of these possibilities some investigators have urged that the commonly used diagnostic term of "non-functioning gallbladder" be replaced with the designation "non-visualized gallbladder."

Because of the dense shadows obtained there has been some concern that the test has lost some

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From the Department of Radiology, University Hospitals and the University of Wisconsin Medical School, Madison 6, Wisconsin.

of the sensitivity present with the compounds formerly used.[1] Faintly visualized gallbladders are uncommon and there is some reason to believe that a diseased gallbladder will occasionally concentrate the material sufficiently to give an apparently normal cholecystogram. It has always been recognized that, infrequently, a pathologic organ might show a normal response and that a normal one might fail to visualize. The latter occurrence has been eliminated to a large extent with iopanoic acid but the possibility of overlooking a diseased gallbladder remains and the likelihood of this occurrence may be even greater than it was.

Following the administration of Telepaque, the normal gallbladder can almost always be visualized without difficulty during fluoroscopy. This makes it possible to use fluoroscopy as a routine part of the examination. The gallbladder can be palpated and upright pressure films obtained. These are particularly valuable for the detection of small stones that may otherwise be missed. Experience has shown that a "gravity type" roentgenogram is an essential part of cholecystography. I have used both upright and lateral decubitus films. The tendency for small stones, especially those of cholesterol or mixed pigment and cholesterol types, to accumulate in a layer in the bile is well known. Sometimes the stones gravitate to the dependent part of the gallbladder; at other times they rise to the top, and still others will form a layer in the bile. This happens because the contents of the gallbladder may be of several different specific gravities, the more recently accumulated bile being less concentrated than that which has been present for some time. The massing together of small stones creates a radiolucent defect much more easily visualized than if the calculi were spread indiscriminately throughout the bile.

VISUALIZATION OF BILE DUCTS

One of the important advantages of the newer compounds such as Telepaque lies in the fact that visualization of the cystic and common bile ducts is obtained in a high percentage of patients in whom there is satisfactory concentration by the gallbladder. The ducts are opacified most frequently during the phase of gallbladder contraction. The frequency of visualization also is increased if the postfat meal film is made in a right lateral decubitus position as described by Kirklin.[3] The normal common duct as visualized in this manner varies from 2 to 7 millimeters in diameter.

If the gallbladder has been removed or if the cystic duct is occluded, it often is possible to opacify the common bile duct by increasing the dose of Telepaque to 2 or 3 times the usual amount (6 to 9 grams). I have used this method, which we have termed oral cholangiography, in a number of cases and have been able to visualize the duct in a high percentage. The bile as it comes from the liver contains a sufficient amount of the contrast substance so that it is radiopaque and concentration by the gallbladder is not required. Thus in many cholecystectomized patients one can, by orally administered Telepaque, obtain information concerning the size of the common duct, determine the presence or absence of obstruction and even identify stones lodged within the duct. It is emphasized that with doses of this size the examination no longer is a test of gallbladder function. If the gallbladder still is present and the cystic duct patent a shadow will be obtained even though the organ may be seriously diseased.

INTRAVENOUS CHOLANGIOGRAPHY

The use of orally administered Telepaque for this purpose does not seem to have come into common use, probably because of the development of another tri-iodo compound, Cholografin methylglucamine. First introduced in Germany under the name of Biligrafin, this drug given intravenously results in visualization of the bile ducts in a fairly high percentage of patients even though the gallbladder is nonfunctioning or has been removed. The uncertainty of absorption of material from the gastrointestinal tract is avoided and the entire examination can be completed in several hours. Because the bile as it comes from the liver is sufficiently radiopaque for roentgen visualization, the concentrating ability of the gallbladder is not required. Ordinarily within 30 to 60 minutes after intravenous administration of 30 cc. of the drug, a satisfactory visualization of the biliary ducts is obtained. If the gallbladder is present and the cystic duct patent, gallbladder visualization will occur after another hour. In such a case opacification of the gallbladder can be obtained even though its concentrating ability has been lost because of disease. The test then is no longer one of function but rather the examination becomes a demonstration of anatomic structures and pathologic processes such as residual stones or duct obstruction. If liver function is impaired, visualization of the biliary duct system is inadequate or does not occur at all. In the presence of jaundice the examination usually is unsatisfactory. Cholografin is excreted by the kidneys and in these cases a pyelogram usually is obtained. Even when liver function is essentially normal in some patients, most of the drug is eliminated by the kidneys and a satisfactory cholangiogram is not obtained.

The availability of a drug such as Cholografin for opacifying the biliary ducts in the cholecystectomized patient has introduced problems in interpretation. There has been some difference of opinion concerning the size of the common bile duct after cholecystectomy in the asymptomatic patient. The cumulative evidence seems to indicate rather clearly that there is little, if any, postcholecystectomy dilatation of the duct in asymptomatic individuals. While there is some variation in the figures given by different observers the normal postcholecystectomy common bile duct probably should not measure more than 10 to 12 millimeters in its maximum diameter (uncorrected for magnification and distortion). We have set a limit of 12 millimeters in clinical work and have considered that any measurement above this probably indicated some degree of obstruction. Because it is difficult to set any measurement as the absolute limit of normal in any roentgen procedure, it is apparent that the determination of duct size must be correlated carefully with the clinical observations, particularly in borderline cases. Wise et al.,[5] stress the importance of the time-density concept in determining the presence or absence of partial obstruction of the common bile duct. Thus, in the normal, the duct attains maximum density at 60 minutes with a gradual decrease in opacity after this time. In the partially obstructed duct the density at two hours will be the same or even increased over that at 60 minutes. In borderline cases of obstruction this observation may be a useful one. These investigators also point out that if the gallbladder remains and the cystic duct is patent the gallbladder may act as a reservoir for the opaque bile and the common duct may remain visible for a long time even though it is not obstructed.

One of the important aspects of intravenous cholecystography is the ability to demonstrate residual stones in the biliary ducts after removal of the gallbladder. It is of interest that stones may be found in the normal sized duct or the duct may be greatly dilated up to 20 millimeters or more. In order to clearly exclude stones, therefore, the entire structure must be visualized and this requires meticulous technic in many cases. Special procedures such as body section roentgenograms to eliminate confusing gas shadows are commonly used. Intravenous or oral cholangiograms occasionally show some dilatation of the cystic duct in the postcholecystectomy patient but this usually is slight. It seems probable that sufficient enlargement of the cystic duct to actually form a gallbladder like reservoir rarely occurs. Because the first portion of the duodenum overlies or is projected to the right of the common duct, reflux of contrast containing bile from the common duct often opacifies the entire first and second portions of the duodenum. The shadow of the duodenal bulb may be mistaken for a persisting or "reformed" gallbladder and care should be exercised in the interpretation of such shadows as evidence of a dilated cystic duct.

Recent interesting observations by Salzman and coworkers[4] regarding opacification of nonopaque stones are worthy of mention. They found that when Telepaque was given for a period of four days in daily doses of 3 grams (1 gram three times daily), roentgenograms taken on the fifth day demonstrated opacification of the periphery of stones within the common duct or gallbladder which were previously not visible. Apparently the continued bathing of the stone in the contrast containing bile leads to an interaction of bile pigments on the surface of the stone and the contrast material so that a ring contoured shadow of the stone develops. They were able to show stones in the duct even in the presence of jaundice and feel that this procedure, which they call the "four day Telepaque test" is probably the best method available for demonstrating common bile duct stones in the jaundiced patient.

EVALUATION OF PROCEDURES

In evaluating the procedures currently available for investigation of the gallbladder and biliary ducts it seems reasonable to conclude as follows:

(1) If the gallbladder is present and the patient is not jaundiced the initial examination should be oral cholecystography using Telepaque or a similar drug. If the gallbladder is not visualized after a 3 gram dose and if extraneous factors, as mentioned, can be excluded, this result indicates gallbladder disease in a high percentage of patients (96 to 98 per cent). In equivocal cases, and particularly with patients weighing more than 175 to 200 pounds, it may be advantageous to repeat the test the following day, using a dose of 6 grams of Telepaque. If the repeat examination is done at a later interval the dose can be increased to 9 grams (3 grams following a light lunch and 6 grams after a fat free supper on the same day). Occasionally this technic will visualize the gallbladder when the initial examination with 3 grams did not. There is need for caution in interpretation when doses larger than 3 grams are used as mentioned in a previous paragraph. The possibility of a diseased gallbladder opacifying under these circumstances must be borne in mind. Particularly with the 9 gram dose technic, visualization of the gallbladder cannot be considered as evidence of a normal organ. If the concentrating ability of the gallbladder is lost or if the cystic duct is obstructed, a cholangiogram will be obtained in the majority of patients who have reasonably normal liver function. Visualization of the common bile duct in these patients without demonstrating the gallbladder is good evidence that the cystic duct is blocked. If it is patent the gallbladder may be outlined since the bile coming from the liver is radiopaque. However, the density is usually below the expected normal and there is no contraction after a fatty meal. The cholangiogram may show evidence of obstruction or of stones within the duct.

(2) An alternate procedure is to follow the oral

test by intravenous administration of Cholografin. The results are interpreted in the same way as those described previously using the double or triple dose of Telepaque.

(3) In patients who have had the gallbladder removed the investigation usually is begun with intravenous Cholografin. However, as pointed out, it is possible to opacify the common duct with orally administered Telepaque provided an adequate amount of the material is given. Oral cholangiography therefore is entirely feasible in many patients.

(4) In the jaundiced patient the technic described by Salzman and coworkers may be of value. It is possible to visualize residual stones by this method which otherwise could not be demonstrated roentgenologically.

OPACIFICATION OF THE LIVER

A simple method for routine opacification of the liver is not available. Thorotrast, a colloidal suspension of thorium dioxide, was advocated some years ago for visualization of the liver and spleen. Thorotrast is retained almost indefinitely in the liver, spleen and lymph nodes and it has a low degree of radioactivity. Because of the long term dangers attendant to its use it has fallen into disrepute and at the present time has little place in the investigation of the biliary system. Other methods of study mostly dependent upon opacification of the vessels of the spleen and liver have been attempted with varying degrees of success. Probably the most commonly used procedure is that of splenoportography. This consists in the percutaneous injection of contrast material, such as 70 per cent Urokon or Diodrast, directly into the splenic pulp. There is a rapid passage of contrast material into the splenic and portal veins. If there is no obstruction of the portal vein, opacification of the liver parenchyma will result. Ordinarily this occurs from 10 to 30 seconds after the injection of the contrast material. Splenoportography has its greatest usefulness in the study of portal hypertension. It is possible to determine the presence or absence of portal obstruction and to demonstrate the collateral veins associated with the process. The ability to opacify the liver parenchyma is of some use in the study of mass lesions involving this organ. While the method is not without some hazard, recent reports indicate a low incidence of serious difficulties such as hemorrhage. Failure of satisfactory visualization occurs in a fairly high percentage of examinations. Compared with cholecystography, percutaneous splenoportography is a relatively formidable procedure but can be of considerable value in the investigation of abnormalities of the liver in selected cases.

Other methods of making the liver parenchyma opaque also depend upon the introduction of contrast material into the blood stream or directly into the vessels of the liver. Aortography has been advocated for this purpose, the bolus of contrast material being introduced percutaneously into the aorta above the level of origin of the celiac axis. Serial roentgenograms are made while the contrast material is passing through the liver. Direct injection of the portal venous system through the abdominal wall has been reported. All of these methods require skilled personnel and most of them demand special radiographic equipment for the making of rapid serial exposures. Because of these aspects, none of these procedures are likely to be widely used in routine investigation of the biliary system.

1300 University Ave.

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ST. LOUIS SURGICAL SOCIETY TO PRESENT PANEL

"Current Concepts of Breast Cancer" will be the topic of a panel discussion to be presented by the St. Louis Surgical Society at 6:00 p. m., November 2, at the St. Louis Medical Society Auditorium, 3839 Lindell Blvd., St. Louis. All members of the medical profession are invited to attend.

The panel will consist of John P. Wyatt, M.D., professor of pathology and associate director of the Department of Pathology, St. Louis University School of Medicine, moderator; Samuel G. Taylor, III, M.D., associate professor of medicine, University of Illinois School of Medicine and chairman of the section on Medical Oncology, Presbyterian Hospital, Chicago; Bo I. Törnberg, M.D., visiting assistant professor, surgical pathology, Washington University School of Medicine (associate professor of pathology, Karolinska Institute, Stockholm, Sweden); Jerome A. Urban, M.D., instructor in surgery, Cornell University Medical College and attending surgeon, Memorial and James Ewing Hospitals, New York; and Don C. Weir, M.D., associate professor of clinical radiology, St. Louis University School of Medicine.

Polycythemia

The Diagnosis and Management

GEORGE E. THOMA, JR., M.D., *St. Louis*

Polycythemia may be defined literally as the presence of increased numbers of all cells in the peripheral blood. The term is generally employed, however, to signify an increase in the concentration of erythrocytes in the circulating blood. The most frequently encountered form of polycythemia is *hemoconcentration* in which there is a relative increase in red blood cells per unit volume as the result of a decrease in circulating plasma volume such as is seen in dehydration, burns and shock. *Secondary polycythemia* occurs as an adaptation response to prolonged hypoxia as the result of altitude, pulmonary disease or congenital heart disease. *Polycythemia vera* is an idiopathic excessive production of erythrocytes by the bone marrow and in most instances a concurrent but less striking increase production of granulocytes and platelets. Far less confusion will arise if the more descriptive terms "erythrocytosis" and "erythremia" are used for the respective designation of secondary polycythemia and polycythemia vera.

The symptomatology, laboratory manifestations and clinical management of polycythemia vera or erythremia are herewith presented.

SYMPTOMATOLOGY

The erythremia patient may present himself with any of a multitude of complaints, the most common of which are fatigue, headache, pruritus, a heavy feeling of the extremities, dyspnea or the symptoms of peptic ulcer. In most instances, however, it is the symptomatology of the complications of the disease which cause the patient to seek medical help. The most frequent complications of erythremia are those resulting from intravascular clotting or hemorrhage. Thrombotic episodes may occur in the peripheral, mesenteric, coronary, retinal and cerebral vessels. In this disease, the paradoxical situation of an increased tendency to both intravascular clotting and hemorrhage occur simultaneously and with almost equal frequency. The mechanism of thrombosis is the result of the combined effects of increased blood viscosity and resultant decrease in the rate of blood flow. These two factors combined with high platelet levels in many instances, cause a sludging of the blood and ultimate clot formation. The explanation for the hemorrhagic tendencies, however, is not nearly so simple or clearly understood. The dilatation and engorgement of small vessels, reduced fibrinogen levels, the inability of the fibrin clot to hold together the excessive number of red cells and the fallout phenomenon of red cells contribute to the hemorrhagic tendency. It should be pointed out that itching, particularly after a bath, is the only consistent symptom in erythremia.

The physical findings in erythremia may be divided into cutaneous, vascular and systemic. The principle cutaneous finding is a purplish red color of the skin and mucous membranes. This is more or less temperature dependent, tending to be more red in a warm environment and more purple in a cold environment. Hemorrhage, ecchymosis and secondary pigmentation are frequently seen. The easy bruising tendency is prevalent. There may also be acne rosacea, hemangioma or spider nevi.

The vascular findings are moderate hypertension, engorgement of the retinal vessels, and those normally encountered as the result of local thrombosis or hemorrhage. Ophthalmoscopic examination usually reveals a deeply pigmented retina with dark purple veins and engorged tortuous and irregular arteries with a moderate degree of A-V nicking. The eyeground findings are sometimes the first clue to the diagnosis. Thrombosis most frequently occurs in the veins of the lower extremities. Coronary, mesenteric and cerebral thrombosis and cerebral vascular hemorrhage are common. Portal thrombosis infrequently occurs and has even been considered a cause of erythremia by some authors. Occlusion of retinal vessels may occur and the attendant sudden impairment in visual acuity is not infrequently the presenting symptom.

The systemic physical findings in erythremia are splenomegalia, hepatomegalia and those common to gout. Exertional dyspnea and a tendency to frequent respiratory infections is not unusual. Roentgenograms of the chest usually reveal increased vascular markings and may even show frank pulmonary congestion.

LABORATORY MANIFESTATIONS

Erythremia should be considered in the differential diagnosis of any patient whose hemogram reveals values in excess of 6 million red cells, 18 grams of hemoglobin or 54 per cent hematocrit. Statistically the erythrocyte count is least reliable and the hematocrit is most dependable. Hematocrit values of 70 vol. per cent or greater are *per se* evidence of erythremia since hemoconcentration to this level in the presence of a normal absolute red cell mass is impossible. For hematocrit levels of less than 70, it is necessary to measure the absolute red cell mass in order to establish the presence or absence of increased erythropoiesis. The measurement of the red cell mass is relatively easy either by the employment of the direct red cell tagging method with radiochromium 51 or by the indirect method of calculation from the radioiodinated serum albumin method of plasma volume determination. The latter method is preferred because of its simplicity and relatively small probable technical error. A red cell mass in excess of 45 cc. per kg. is confirmatory evidence of increased erythropoieses. This value is somewhat higher than that derived from the Cr^{51} direct red cell tagging method due largely to the fact that the venous hematocrit is approximately 10 per cent higher than the total body hematocrit. If the red mass value is thought to be equivocal, the presence or absence of hypererythropoiesis can be ascertained by measuring the clearance of radioiron (Fe^{59}), from the circulating blood.[3] In erythremia and erythrocytosis there is a rapidly increased clearance of the radioiron.

In the literal interpretation of the definition of erythremia as a myoloproliferative disease, an accompanying increased production of granulocytes is implied. In actuality, however, the peripheral blood evidence of granulocytic hyperplasia is quite variable. There may be no evidence of leukocytosis, a mature leukocytosis or one with a granulocytic immaturity. Stroebel and Law[7] subclassified erythremia on the basis of the leukocyte response into *simple,* in which the leukocyte picture of peripheral blood is normal; *mature leukocytic type* characterized by a leukocytosis of mature granulocytes, and the *leukemoid type* in which the leukocytosis is accompanied by increased numbers of immature granulocytes in the peripheral blood. This secondary classification is useful in clinical management considerations as will be noted in the subsequent section devoted to clinical management. It also bears a direct relationship to the incidence of splenomegaly.

The red cell counts range from 7 to 10 million. The hematocrit may reach 80 to 85 volumes per cent. In severe cases of erythremia, the mean corpuscular volume is often reduced below normal, usually being about 80 cubic microns. In cases in which the mean corpuscular volume is considerably less than 80 cubic microns, it is theoretically possible that the red cell counts could be as high as 16 million; however, it does not appear possible for the red cell count to exceed 10 million if the mean corpuscular volume is not less than the average normal of 90 cubic microns for, as Wintrobe states,[9] "There is 'standing room' only for about 11,500,000 cells and it is inconceivable that any one could live with the blood consisting of all cells and no plasma."

Where there is a leukocytosis, the range most commonly extends from 15,000 to 25,000 but values above 50,000 have been observed.[5] In the leukemoid type, there is an increased number of metamyelocytes and a 2 or 3 per cent of myelocytes are occasionally found in the peripheral blood. The more immature blast forms are rarely observed. The granulocytosis may not necessarily be confined to the neutrophils as there may also be a slight to moderate increase in the number of basophils and eosinophils.

Thrombocytosis is less frequent than granulocytosis. Cases have been reported, however, with platelet counts ranging from 3 to 6 million.[2] The platelet count increase is not considered to be significant unless it exceeds 350,000 to 550,000 depending upon the method of measurement employed.

The bone marrow in erythremia shows no consistent or characteristic pattern. Wide variations in cellularity and cell type predominance are seen. The myeloid-erythroid ration (M-E ratio) may be increased or decreased and does not necessarily bear any relationship to the degree of marrow cellularity or to the peripheral blood with respect to the maturity of the granulocytes. Perhaps the lack of correlation between the peripheral hemogram and the marrow observations are simply due to the often overlooked fact that the findings of a given bone marrow biopsy merely reflect the status of the marrow in the specific site from which it is taken and do not necessarily reflect total marrow activity. A much more reliable index of marrow cellularity can be determined by measuring the myeloid-erythroid layer, or buffy

Procedure	Normal	Hemoconcentration	Erythrocytosis	Erythremia
Hematocrit (Vol. %)	M-47 (54) F-42 (47)	↑	↑	↑
RBC (mill/cc)	M-5. 4 (6. 2) F-4. 8 (5. 4)	↑	↑	↑
Hemoglobin (gm)	M-15. 8 (18) F-13. 9 (16)	↑	↑	↑
WBC (1000/cc)	7. 4 (12)	↑	↔	$\overset{\uparrow}{\longleftrightarrow}$
Platelets (1000/cc)	234^2 (350) 409^3 (545)	↑	↔	$\overset{\uparrow}{\longleftrightarrow}$
R. C. Vol. (cc/kg.)	M-34 (45) F-31 (40)	↔	↑	↑
Oxyhemoglobin Saturation	M-98 (95) F-97 $(94)^4$	↔	↓	↔
Bone Marrow		Normal	Erythroid-hyperplasia	Myeloid-hyperplasia
Myeloid-Erythroid Layer (mm)	6 $(8)^5$	↔	$\overset{\uparrow}{\longleftrightarrow}$	↑

Fig. 1. The differential laboratory diagnosis of polycythemia. (1) Estimated "universal mean" values taken from Albritton[1] except as otherwise noted. (2) Indirect method of Fonio. (3) Direct method of Rees-Ecker. (4) Assumed value. (5) Taken from Stroebel et al.[7]

coat, of nucleated cells in aspirated marrow which is centrifuged in a hematocrit tube in the same manner employed to measure the volume of packed red cells. This simple procedure is particularly useful in those cases in which bone marrow biopsy fails to reveal evidence of hypercellularity. It often exceeds the maximum normal of eight millimeters.

The life span of erythrocytes of patients with erythremia has been studied[4] by isotopic tagging methods and was found to fall within the normal range of 110 to 120 days. These studies confirm the generally accepted theory that the disease is one of increased production by the bone marrow of erythrocytes of a normal life span rather than one of normal production of cells with an increased longevity.

While not of diagnostic importance, it is interesting to note that increased uric acid levels are frequently seen in patients with erythremia. The frequency of hyperuricemia appears to be related to the degree of myeloid immaturity, being reported in one series[6] as 28 per cent of cases of the simple type and 54 per cent of cases of the leukemoid type. Clinical gout, however, was much less frequent, particularly in the simple and mature leukocytic types. It occurred in only 8 and 15 per cent of these two types. In the leukemoid type, however, it was observed in 46 per cent of the cases.

DIAGNOSTIC CRITERIA

Polycythemia vera or erythremia should be suspected in any patient with a red or purplish colored face or any patient with itching after a bath. The later symptom is usually elicited in the course of taking the regional history and is rarely an unsolicited complaint of the patient. A simple hemoglobin or hematocrit determination will in almost all instances satisfactorily screen out those patients on whom more definitive procedures to establish the diagnosis should be carried out. Any clinically unsuspected case with an incidental hemoglobin level of more than 18 grams or a hematocrit above 55 and without otherwise obvious signs of hemoconcentration should also be further studied in the systematic manner to be described. The possibility of erythremia must also be considered in any patient with confirmed massive hemorrhage from the gastrointestinal tract or elsewhere in whom normal or only slightly decreased hemoglobin and hematocrit values are found in the stabilized period after hemodilution has occurred.

The laboratory procedures required in the systematic investigation of a patient in whom the diagnosis of erythremia or erythrocytosis is suspected are listed in sequential order in figure 1 with the normal values of these procedures recorded. The direction of change for each of the disease entities associated with an increased volume of packed red cells is indicated by the arrows. The numbers in parenthesis after the "universal mean" values represent the extremes of the normal range in the direction of expected deviation in these conditions. Further deviation is considered pathologic. Figure 1 also serves as a summary of the differential laboratory diagnosis of these disease entities. As was noted before, there is no consistency in the bone marrow biopsy findings and this examination is not essential except in patients with the peripheral blood findings of the leukemoid type of erythremia.

A number of comments concerning the differential laboratory procedures and findings should be made. From the standpoint of accuracy, the erythrocyte count is the least significant. A variation of less than 1.6 million red cells per cubic millimeter is not considered significant. The hematocrit determination is the most reliable, as a variation of 2 per cent or more is considered to be significant. It should also be noted that there may be considerable variation in the platelet counts which may range from 273,000 to 545,000 as compared to the stated universal mean value of 409,000. Arterial oxygen saturation determinations need not be done other than for academic interest in those patients in whom there is no clinical or roentgenologic findings suggestive of hypoxia.

CLINICAL MANAGEMENT

Historically, the treatment of erythremia has been venesection. This procedure was employed in ancient times in the treatment of many diseases and blood letting was especially common for the treatment of the plethoric patient. Since the advent of the nuclear age, the artificially produced radioisotope of phosphorus (P^{32}), has replaced venesection as the treatment of choice in this disease. The latter procedure, however, is still employed as a valuable adjunct to the modern management wtih radiophosphorus.

Radiophosphorus is selectively taken up by the bone marrow in higher proportions than anywhere else in the body and exerts its beneficial action in the treatment of this disease by delivering toxic doses of beta radiation to the bone marrow. There is an increased utilization of phosphorus by the cells of any tissues with an accelerated rate of growth and consequently a selective increase in uptake by the cells of such a system. The effects of this selectivity, however, are relatively insignificant compared to the radiation effect on the whole bone marrow. Other chemo-bone marrow toxins such as phenyhydrozine and nitrogen mustard have in the past enjoyed some popularity in the treatment of erythremia; however, the severity of their toxic effects on other cellular elements of the marrow has precluded their long-term usage and thus they have not stood the test of time. Recently Wald and associates[8] reported the successful use of Myleran® in the management of erythremia and it is possible that further clinical investigative work will prove this to be an effective and safe therapeutic agent. The fact that the life expectancy of the erythremia patient without the leukemoid leukocyte picture has been increased to 20 years, or double the previous life expectancy of approximately 10 years, with the use of P^{32} serves to substantiate the claim that it is the treatment of choice at the present time.

Since radiophosphorus exerts its action in the marrow and not in the peripheral blood, it will not effect a significant reduction in the blood volume or, more specifically, in the red cell mass for a period of approximately 60 days. During this time, peripheral erythrocyte destruction is progressing at the normal rate of approximately 0.85 per cent per day, while at the same time the rate of erythropoiesis is reduced to a value appreciably less than 0.85 per cent per day. In order, therefore, to reduce the risk of hemorrhage or thrombosis during this initial treatment phase, venesection of sufficient quantities of blood to reduce the hematocrit to a level of 50 volumes per cent or below is indicated. The blood volume should be reduced in maximum increments of 500 cc. per day. This may be carried out prior to P^{32} administration or within two or three days following.

The patient's course is followed by monthly hematocrit determinations. If after a period of three to four months the rate of erythropoiesis has not been sufficiently suppressed in order to maintain the hematocrit level to which the patient was initially reduced by venesection, a second dose of radiophosphorus is administered. Except in patients with a relatively high degree of radiosensitivity, a second dose of P^{32} within the first six months of treatment is usually indicated. After the second administration of radiophosphorus, no further P^{32} is given within the first year of treatment. For the remainder of the first year, the hematocrit level must be maintained at a safe level by venesection in the event that the radiophosphorus therapy has failed to accomplish this. Subsequent maintenance doses of P^{32} should be administered after the first year in order to keep the hematocrit at a level of 55 or below. This may be necessary at yearly intervals or less; however, the average period of remission after P^{32} is approximately two years. It has been found that the clinical course is much smoother if maintenance doses are administered when the hematocrit is consistently increasing but before the 55 per cent level is reached.

There is a 15 to 20 per cent incidence of granulocytic leukemia in erythremia and there is no evidence to date that P^{32} increases this incidence over that observed when other forms of therapy are employed.

SUMMARY

Polycythemia or erythremia is defined as an idiopathic excessive production of erythrocytes by the bone marrow. It may be subdivided into simple, mature leukocytic and leukemoid types.

The symptomatology of erythremia is for the most part that of the thrombotic or hemorrhagic complications of the disease. The only consistent symptom is itching, particularly after a bath.

The principle cutaneous physical finding is a purplish red color of the skin and mucous membranes. The vascular findings are chiefly those encountered as a result of local thrombosis or hemorrhage. The finding of a deeply pigmented retina with dark purple veins and engorged tortuous and irregular arteries may be the first clue to the diagnosis. The systemic physical findings are splenomegalia, hepatomegalia and those common to gout.

The significant clinical laboratory manifestations are hemogram values in excess of 6 million red cells, 18 grams of hemoglobin, 55 per cent hematocrit, red cell mass of 45 cc. per kg. and a normal arterial oxyhemoglobin saturation. The polycythemia of hypoxia, erythrocytosis, is characterized by a reduced oxyhemoglobin saturation level. Leukocytosis and thrombocytosis are common in erythremia but not in erythrocytosis.

Since the advent of radiophosphorus (P^{32}), therapy, the life expectancy of the erythremia patient without the leukemoid leukocyte picture has been increased from 10 to 20 years; so at the present time P^{32} is the treatment of choice. In order to reduce the risk of hemorrhage or thrombosis venesection to reduce the hematocrit to 50 or below is indicated.

3915 Watson Rd.

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Cardiac Defects

Direct Vision Repair Using Extra-Corporeal Circulation

Initial Experience at the University of Missouri Medical Center

HUGH E. STEPHENSON, JR., M.D.; WILLIAM H. WADE, M.D.; JACK M. MARTT, M.D.;
KENNETH K. KEOWN, M.D., AND CONSTANTINE. S. ANAST, M.D., *Columbia*

THE MODERN era of heart surgery began when Robert Gross did the first successful ligation of a patent ductus arteriosus in 1938.[1] The next decade saw rapid advances in operations involving the great vessels adjacent to the heart. Although several early investigators attempted operations on the valves within the heart, the credit for the first successful operation of this type must go to Charles Bailey[2] in 1948. This procedure consisted of inserting a finger inside the heart and "blindly" separating the commissures of the mitral valve in a case of mitral stenosis. This represented the beginning of a productive era of repairing lesions within the cardiac chambers by closed or "blind" technics. However, it was obvious that many intracardiac lesions required direct vision for successful repair, and technics to provide exposure of the interior of the empty heart were essential. To John Gibbon[3] goes the credit for developing and using successfully the first heart-lung machine (in 1953) to provide for extra corporeal circulatory by-pass of the heart and lungs. Since that period a number of medical centers have made major contributions to this technic so that at this time several types of congenital and acquired cardiac defects may be safely corrected under direct vision.

The first open-heart operation at the University of Missouri Medical Center was performed on January 24, 1958. This represented the culmination of a year of intensive effort in the experimental laboratories at the Medical Center. An integrated team of physicians, technicians and nurses was assembled which could provide for the multifaceted care which these patients require. Several members of this team had acquired experimental and clinical experience with the problems of open-heart surgery at other centers prior to the initiation of the program at the University of Missouri.

The technical problems resolved in the laboratory included intensive testing of the perfusion and monitoring equipment; an experimental analysis of physiologic phenomena such as oxygenation, hemolysis, physiologic response to varied flow rates and control of blood pH. The departments of Medicine, Pediatrics, Radiology and Surgery, together with the State Crippled Children's Service and the Hospital Blood Bank, have all played important roles.

The pump-oxygenator in use at the University of Missouri is of the bubble type as designed by DeWall et al.[4] and modified in several ways. While many types of apparatus are available, this one was preferred because of familiarity with it, its simplicity, ease of operation, safety and its relative inexpensiveness. The following 21 cases represent our clinical experience with open-heart surgery to date.

CASE REPORTS

Case 1. 00-63-24. P. S. was aged 7 years. Diagnosis was atrial septal defect, secundum type. Operation on January 24, 1958, was accomplished with by-pass of 11½ minutes with good result and prompt recovery. Discharge was on the thirteenth postoperative day.

Case 2. 00-07-52. S. G. was aged 11 years. Diagnosis was atrial septal defect, secundum type. Operation on January 28, 1958, was accomplished with by-pass of 23 minutes with good result and prompt recovery. Discharge was on the ninth postoperative day.

Case 3. 00-61-22. R. S. was aged 4 years. Diagnosis was valvular pulmonic stenosis. Operation on January 31, 1958, was accomplished with by-pass of 5½ minutes with good result and prompt recovery. Discharge was on the ninth postoperative day.

Case 4. 00-73-16. M. H. was 44 years old. Diagnosis was atrial septal defect, secundum type. Operation on April 11, 1958, was accomplished with by-pass of 16½ minutes with good result and prompt recovery. Discharge was on the eighteenth postoperative day.

Case 5. 00-92-72. F. C. was 43 years old. Diagnosis was valvular pulmonic stenosis. Operation on April 18, 1958, was accomplished with by-pass of 9½ minutes. Postoperatively the patient developed massive hemothorax, probably from an intercostal artery and was re-operated upon. Following the second operation the patient developed a series of severe complications including persistent gastric dilatation, profound electrolyte disturbance, septicemia and, finally, lower nephron nephrosis. She died on the eighth postoperative day. Autopsy revealed a satisfactory valvulotomy.

Case 6. 00-91-01. M. T. was aged 3½ years. Diagnosis was ventricular septal defect. Operation on May 28, 1958, was accomplished with by-pass of 23½ minutes with good result and prompt recovery. Discharge was on the thirteenth postoperative day.

Case 7. 00-79-72. M. T. was 7½ years old. Diagnosis

From the Departments of Surgery, Medicine and Pediatrics of the University of Missouri Medical Center, Columbia, Mo. W. H. W. now at Bellevue Medical Center. New York.

was congenital aortic stenosis, valvular and subvalvular. Operation on June 27, 1958, was accomplished with by-pass of 33½ minutes using elective cardiac arrest with potassium citrate. Postoperatively the patient seemed to do well and was discharged on the twentieth postoperative day. He was readmitted on August 25, 1958, in severe left heart failure which was refractory to all treatment. He died on October 23, 1958, and autopsy disclosed a subvalvular aortic stenosis, which was not recognized or corrected at operation, and aortic insufficiency.

Case 8. 00-87-00. L. H. was 3 years of age. Diagnosis was ventricular septal defect. Operation on July 18, 1958, was accomplished with by-pass of 15 minutes with good result and prompt recovery. Discharge was on the twelfth postoperative day.

Case 9. 00-73-96. R. F. was 6 years old. Diagnosis was ventricular septal defect. Operation on September 6, 1958, was accomplished successfully with by-pass of 21 minutes. Postoperatively the patient developed massive hemothorax apparently from the ventriculotomy. This was corrected by reoperation. Following this, his recovery was rapid and he was discharged on the fiftieth postoperative day with a good result. The prolonged period of hospitalization was due to a desire to carry out postoperative studies and observation.

Case 10. 00-29-42. K. G. was aged 3 years. Diagnosis was ventricular septal defect. Operation on September 19, 1958, was accomplished with by-pass of 20½ minutes with good result and rapid recovery. Discharge was on the fifteenth postoperative day.

Case 11. 01-01-80. C. T. was 11 years old. Diagnosis was congenital aortic stenosis, valvular type. Operation on October 24, 1958, was accomplished with by-pass of 35 minutes using elective cardiac arrest with potassium citrate. Postoperatively the patient did well but ran a febrile course for several weeks. This subsided with antibiotics and she was discharged in good condition with a good result on December 12, 1958.

Case 12. 00-96-45. P. J. W. was 7 years old. Diagnosis was ventricular septal defect. Operation on October 31 was accomplished with by-pass of 17 minutes. Postoperative recovery was uneventful with good result. Discharge was on the ninth postoperative day.

Case 13. 01-12-45. D. B. was 7 years old. Diagnosis was AV communis, partial type. Operation on November 7 required atrial and ventricular incisions and insertion of an Ivalon prosthesis to repair the septal defect, and correction of the mitral valve. The duration of by-pass was 65 minutes. The patient initially responded well postoperatively but died on the first postoperative day of pulmonary edema. Autopsy revealed persistent severe mitral insufficiency.

Case 14. 01-08-57. D. L. N. was 14 years of age. Diagnosis was valvular pulmonic stenosis and patent ductus arteriosus. Operation on November 21, was accomplished by preliminary closure of the patent ductus followed by open pulmonary valvulotomy with total by-pass of 9 minutes. Postoperative recovery was excellent with good result. Discharge was on the fourteenth postoperative day.

Case 15. 01-18-50. J. H. was 8 years old. Diagnosis was valvular pulmonic stenosis. Operation on December 12, was accomplished with by-pass of 12 minutes. The patient recovered well with a good result. She developed a complete A-V block for five days when sinus rhythm was restored. She was discharged on the eleventh postoperative day.

Case 16. 00-96-62. J. G. was 4 years old. Diagnosis was valvular pulmonic stenosis and patent ductus arteriosus. Operation on September 30 was open valvulotomy accomplished using by-pass of 15 minutes after closure of the patent ductus. Postoperative recovery was prompt with a good result. Discharge was on the thirteenth postoperative day.

Case 17. 01-02-29. W. C. was aged 5 years. Diagnosis was tetralogy of Fallot (ventricular septal defect and valvular pulmonic stenosis). On January 23, 1959, pulmonary valvulotomy and closure of septal defect were accomplished with by-pass of 22 minutes. Postoperative recovery was excellent with complete disappearance of cyanosis. Discharge was on the thirty-third postoperative day.

Case 18. 01-18-51. W. F. was 11 years old. Diagnosis was tetralogy of Fallot (infundibular pulmonic stenosis and ventricular septal defect). Operation on April 11, 1959, was accomplished with by-pass of 82 minutes using potassium citrate arrest. Postoperative course was uneventful and good result was obtained with relief of cyanosis. Discharge was on the twenty-second postoperative day.

Case 19. 01-51-56. G. W. was aged 33 years. Diagnosis was atrial septal defect, secundum type. Operation on April 23, 1959, was accomplished with by-pass of 20 minutes. Postoperative recovery was rapid and with good result. Discharge was on the tenth postoperative day.

Case 20. 01-52-06. M. A. P. was 13 years old. Diagnosis was truncus arteriosus. On April 25, 1959, operation was undertaken with the belief that this patient had a tetralogy of Fallot. Exploratory cardiotomy using elective arrest with potassium citrate showed that no repair was possible. The patient's uncorrected heart was unable to support the added stress of operation and she died in the immediate postoperative period.

Case 21. 00-92-07. S. R. was 2 years old. Diagnosis was ventricular septal defect. Operation on May 29, 1959, was accomplished using by-pass of 21 minutes. Postoperative recovery was excellent with good result. The patient was discharged on the seventh postoperative day.

DISCUSSION

It should be appreciated that the 21 cases presented represent the initial experience with open-heart surgery using the heart-lung machine at the University of Missouri Medical Center. We are gratified by the results obtained in this early experience. A number of factors have contributed to the success of this early group of cases. First must be mentioned the intensive experience accumulated in the experimental laboratories. The surgical technics are sufficiently complex that any short cuts in the preliminary investigative phase will inevitably lead to disaster. A second extremely important aspect in preparing for the clinical performance of this type of surgery is the development of a highly integrated team that can function together with maximum efficiency. Mr. B. J. McClatchey and Mr. James Turner developed a high of skill in preparing, maintaining, and operating the heart-lung machine during the operations. It is indeed a tribute to their skill that none of the deaths in this series are attributable to the heart-lung machine itself. One other aspect considered to be of the greatest importance in obtaining good results is the proper selection of patients for operation. It seems obvious that selection of patients with complex defects or those who have reached the terminal phases of their illness will lead to a high operative mortality in the developmental period. After confidence has been established in the conduct of these operative procedures on good risk patients, the benefits of this technic can be extended to poorer risk patients.

It will be noted in analyzing the 21 cases that seven different types of lesions has been operated on using the heart-lung machine; pulmonic stenosis, ventricular septal defect, atrial septal defect, aortic stenosis, tetralogy of Fallot, A-V communis and truncus arteriosus. Of these lesions, truncus arteriosus is not correctable by present technics and the correction of A-V communis carries a high mortality rate in all series. These two cases failed to survive operation in this series. Of the remaining 19 cases one died in the early postoperative period and one died approximately three months postoperatively. The former was a patient with valvular pulmonic stenosis who postoperatively suffered a series of severe complications leading to death. While it is hoped that further experience will render such complications infrequent, it is apparent that they can never be entirely prevented. The latter patient, who died in the late postoperative period, had combined valvular and subvalvular aortic stenosis. Being our first experience with this lesion, the subaortic component was unrecognized and was not corrected. This is the type of knowledge which is only gained through painful experience and such tragedies should be entirely preventable in the future. The seventeen surviving patients are in good health without sequelae and have returned to full activity. As stated, in our opinion, none of these deaths was due to the extracorporeal perfusion itself.

One of the major problems faced by all centers using heart-lung machines is the procurement of the large quantities of freshly drawn heparinized blood that are necessary. We are deeply grateful to Dr. Vincent Perna, Director of the Blood Bank at the Medical Center, and his staff, for their help without which this program would have been impossible. Recently, arrangements have been made with the State Prison in Jefferson City, Missouri, to procure blood for these cases and it is anticipated that through their cooperation the large problem of blood procurement will be solved. The American Red Cross, Dr. Owen Kearns, Director of the State Crippled Children's Service, and the Missouri Heart Association have given their unfailing help and enthusiastic cooperation in working with the patients and their families.

Too little time has elapsed to permit a conclusion as to the final results obtained in these cases. They will be carefully followed and physiologic data will be obtained to determine definitely the degree of their improvement. However, two facts are already apparent. The first is the low morbidity experienced by those with successful repairs. Many patients were ready to be discharged from the hospital 10 days following operation. The second fact is that the survivors have shown evidence of essentially complete correction of their defects.

The field of cardiac surgery is changing rapidly with regard to diagnostic and surgical technics. Undoubtedly, with increasing knowledge and experience, continual improvement in results can be anticipated in the future and a larger number of defects will become curable.

SUMMARY

A review of the initial experience with open correction of cardiac defects using the pump-oxygenator is presented. The case material includes six with pulmonic stenosis (two with patent ductus), six with ventricular septal defect, three with atrial septal defect, two with aortic stenosis, two with tetralogy of Fallot, one with truncus arteriosus and one with A-V communis.

We wish to express our appreciation to Dr. William Loney of the Department of Surgery for his help in the preparation of this manuscript.

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STATE BOARD OF REGISTRATION FOR THE HEALING ARTS

The State Board of Registration for the Healing Arts became effective on August 29, taking the place of the former State Board of Medical Examiners and the board licensing osteopathic physicians and surgeons. The new board will license both medical and osteopathic physicians.

The Governor made his appointments to the new State Board of Registration for the Healing Arts on September 4. The members are Walter S. Sewell, M.D., Springfield; D. Elliott O'Reilly, M.D., St. Louis; Ralph Perry, M.D., Kansas City; H. O. Loyd, M.D., Jefferson City; Richard A. Michael, D.O., Jefferson City, and R. W. Matheny, D.O., Chillicothe.

Mental Health

Working Together for an Improved Missouri Program

ADDISON M. DUVAL, M.D., *Jefferson City*

It is a pleasure and a privilege for me to address you today as the new Director of the Missouri Division of Mental Diseases. I am most appreciative of your invitation to appear at this meeting to discuss the new state mental health program and the relationships with the Association and its members.

In a public statement at the time of my appointment, I stated my belief that Missouri cannot develop an outstanding mental health program without the support of organized medicine. One can imagine my enthusiasm, therefore, when I received a copy of the official resolutions adopted at your last annual meeting in which you promise the active support of your membership so that Missouri can move forward in this area of much needed health services.

During the interim since my appointment last year, we have not been idle. I have worked along with the Mental Health Commission in program planning and in developing the central office. About October 1, 1958, we were happy to secure the services of Dr. Louis Belinson, a qualified psychiatrist and hospital administrator, as Deputy Director of the Division. Dr. Belinson has done a good job, in the interim before my arrival on April 1, in developing a knowledge of the facts concerning the present on-going mental hospital program in Missouri, including both assets and liabilities. From this base, we will proceed with our plans. We have also been gathering data and ideas from many other sources which will prove helpful as we plan a new design for mental health for the state. It is to this design and to present liabilities and assets that I wish to direct your attention today.

To me it seems clear that the basic objectives of a state mental health program are (1) to provide modern care and treatment to the state's mentally ill where this is not provided by other means, and (2) to establish a preventive plan to forestall the development of mental illness. Inherent in these broad objectives would be included the reduction of disability of illness and the benefits which ensue from both education and research. We must also keep in mind the proper relationships between the private practice of medicine and state medicine. I have heard of no conflict between the two in Missouri, and I see no reason why any should develop. The ratio of psychiatrists per 100,000 population in Missouri is 3.5 while at least three states (New York, Connecticut, Massachusetts) have three times that number. The District of Columbia has several times the ratio of Missouri and yet a new private patient may wait for two weeks there for an appointment with a psychiatrist. One should not assume from this that Missouri necessarily has more mentally healthy citizens than the District for this is but another example of medical experience—that where services are expanded better identification of clinical needs and resulting demands for more services are seen. From these facts one may conclude that the state program poses no threat to the private practice of psychiatry in Missouri. We hope to bring in more private psychiatrists along with more for our program.

I do not need to remind this audience that mental illness and the disability that results constitutes the most important public health problem today. However, the facts supporting this statement are so overwhelming that many fail to grasp them clearly. Let's look at them again. From reliable sources one is told that 16 million people in the United States suffer some form of mental illness. This is one of every ten persons! An estimated 10 per cent of all public school children are emotionally disturbed and need mental guidance. About 3 per cent of the entire population is mentally deficient or retarded and many of these have to be hospitalized. Mental illness plays a significant roll in crime, delinquency, suicide, alcoholism, drug addiction, divorces and in broken homes. One of every two hospital beds in the U. S. is occupied by a mental patient and almost 98 per cent of these patients are in public mental hospitals. Keeping in mind this enormous burden of hospitalized patients, one still must not forget that if we are ever to do anything about cutting down this number, we must develop helping services to these people long before they get to the hospitalization stage.

Promoting good mental health, treating mental illness and preventing disability is such an extensive and complex problem that government cannot and should not be expected to handle this problem alone. It is necessary to turn for assistance to such groups as organized medicine, schools, churches, labor organizations, industry, private and voluntary agencies and other citizen groups. There should be careful integration, cooperation and coordination of well formulated plans by all these groups. Otherwise, there may result a polyglot of plans, organizations and functions with resulting duplications and omissions too costly to endure in both efforts and dollars expended.

Director, Missouri Division of Mental Diseases, Jefferson City.

Presented before the Missouri State Medical Association, Kansas City, Missouri, April 6, 1959.

Once it is decided what responsibility private groups should and will assume, the Division of Mental Diseases will then proceed to plan with other public groups—county, state and federal—how public funds can be spent for best results. Our program should be broad in scope and should include mental hospitals, homes and schools for the mentally retarded, outpatient clinics for both adults and children, and our share of the responsibility for epileptics, drug addicts, alcoholics, delinquents and criminals. In some states the clinic and the consultation service programs are both carried on wholly at state expense while in other states the county operates the programs and the state and county share expenses equally. Several counties may join together, if necessary, to develop such programs. Experience shows that research, education and training are usually better controlled and integrated at the state level.

In Missouri, one of the first major problems will be to work out an agreement as to what will be the responsibility of the counties, the cities and the state with respect to mental hospitals and clinics and other community psychiatric services. The problem raised by the proposed transfer of the Kansas City Receiving Hospital emphasizes the need for an early policy decision. It appears to me that the present plan by which each county pays $6.00 a month for each hospitalized indigent patient from that county is cumbersome, outmoded and uneconomical. If the counties are to pay anything it would seem that the amount should be more realistic, possibly in the nature of half the average actual per diem hospital cost.

Next, I should like to direct attention to the condition of mental health facilities in the state with special reference to existing deficiencies.

1. The location of some of the institutions is unfavorable for recruitment of professional staff because of the distance from medical centers. This is particularly true concerning Nevada, Farmington, Marshall and, to a lesser extent, about Fulton and St. Joseph. Because of this, we may have to consider whether active treatment patients should be treated in hospitals near medical centers and long-term care patients in the more isolated institutions.

2. The overcrowding of patients in all the state hospitals is at present causing great distress for both patients and staff. The maximum overcrowding at present is approximately 120 per cent. Such a condition not only deters the improvement of patients but uses up bed space needed for recoverable patients waiting to be admitted. It also overloads the supporting services of the hospital to the breaking point. In the schools for the retarded, it forces a waiting list which is quite unrealistic and a source of continuing discontent to everyone. There seems little doubt but that Missouri needs at least one thousand new beds in its schools for the retarded and in addition a much more active treatment program. The need for more beds in the mental hospitals is not only slightly less acute but I suspect that a number of these hospitalized patients do not need to be in the hospital at all, provided they can be given certain supportive medical and social services in their local communities. I refer here to nursing homes, family care, vocational or other supportive counselling case work, sheltered workshops and prehospital and posthospital clinic examination and guidance. With increased cooperation between state hospitals and family physicians, I feel sure some of these patients will not need as long hospitalization.

3. A great liability, possibly the greatest, is the shortage of professional staff for both the institutions and the clinics. As you well know there is a great shortage of professional psychiatric personnel both locally and nationally. The national shortage of physicians in state hospitals is 55 per cent. Among the states, Missouri stands in 39th position, having less than one third of the number of physicians needed according to present standards. Here is where the Missouri State Medical Association can give the most help in my opinion. I believe if you get firmly behind a recruitment program, which we will develop in our central office, that you can force physicians' salaries in the Division of Mental Diseases to be raised to competitive levels and that through your earnest efforts you can help us find physicians willing to participate in an improved mental health program for the state. Without your active support, I do not believe that we alone can succeed.

I feel somewhat more optimistic about our own efforts to recruit other professional personnel. At any rate, we plan a lively and stimulating recruitment program as our plans and our funds permit. On our success in increasing professional staff and reducing overcrowding, our hospital program will stand or fall. It is as simple or as complicated as that!

4. Another acute deficiency faced is the total absence of special facilities for psychotic children in any of our mental hospitals in the Division. This shortage is made even more acute because of the tragic shortage of residential treatment centers for emotionally disturbed children operated either by private or public funds in the state. Therefore, children in the state who should be treated in such centers have to come to the state hospital as there is no other place for them to go. This problem is high on our priority list for solution, but I am opposed to building new children's units in state hospitals on a "crash" basis without careful advance estimation of the needs, the distribution of city, county and state responsibilities and the possibilty of findng the professional staff to provide adequate therapy of these children. Just to build a building in which to confine these children without giving them proper care and treatment would

not only be short-sighted but a disservice to the children as well.

5. Still another deficiency is the great state of disrepair and dilapidation of many of the buildings in the state institutions. Some of these buildings are 75 to 100 years old and are completely antiquated and unfit as treatment or service units. It is poor management to permit physical facilities to go without proper continuing maintenance and, in addition, it is costly to the taxpayers in the long run. We expect to approach this problem through modern management planning and after careful engineering and architectural surveys, in cooperation with the Chief of Planning and Construction, we expect to work out both short and long-range proposals to remedy this situation. The lack of such planning has already given and is still giving trouble in our new building construction. Appropriating for construction without careful program studies must not be further permitted. With this in mind, we reduced the capital improvement budget request for the next biennium from approximately 30 million dollars recommended by the hospital superintendents to approximately 3 million dollars.

6. Another deficiency in the state program was the lack of central over-all planning, no integration of management controls and no establishment of any objectives. Proper corrective action has now been taken and I am sure that if a qualified central office staff is provided, it will pay for itself many times over in both improvements and in dollar savings in the years ahead.

7. Another deficiency relates to the need to overhaul the statutes under which the Division of Mental Diseases and the state institutions operate. Some improvements were made by the last General Assembly but much more needs to be done. Many of the statutes are antiquated and entirely out of keeping with modern language and modern medical concepts. However, I suspect a special study group would need to spend time on this problem in order to come up with an over-all plan which could be heartily approved by all concerned. This is a problem which needs the careful attention of many people, especially physicians, psychologists, ministers, sociologists, lawyers, penologists, judges and legislators.

8. The last deficiency I will mention is the almost total lack of research in our present mental health program. I believe each state has a responsibility to participate in mental health research and that research should not be the sole province of either the federal government or private groups. The same deficiency applies in a somewhat less degree to the education and training of professional mental health personnel. It is our intention to promote both research and training to the maximum extent possible in the state. It is our view that such programs would be most helpful in our efforts to recruit professional personnel in medicine and in the several allied disciplines and that our treatment programs cannot help but be improved in the presence of good research and teaching.

Other deficiencies could be mentioned but I do not want to appear either morbid or nihilistic. Actually, I am quite hopeful. As bad as the situation is, it could be worse. Missouri is not at the bottom of the states in its mental health program even though it is below the average in all indices compared in a recent study, except in per capita personal income. This might appear to indicate a rather dismal picture but actually the situation is not as bad as it sounds and there are some really cheerful and hopeful aspects. These are the assets in our early evaluation studies and they may be even more important than our deficiencies.

A good asset is presence of a sizable central core of dedicated mental hospital personnel around which can be built an improved staff in both quantity and quality. These dependable experienced people are found from superintendents to the lowest paid employees. They are the foundation stones in our building program. Another important asset is the excellent Commission on Mental Health. Under the dynamic and forceful leadership of its chairman, ex-Senator Francis Smith, and in the presence on the commission of three psychiatrists and a competent business executive, there is assurance of continuing forward movement in the program. I have been most impressed with the verve and zest and sincerity with which this commission tackles even the most difficult problems. The commission will be a tower of strength to the director, I can assure you. I will continue to lean heavily on them for counsel and guidance in the action program.

I think it is a great asset that Governor Blair has such a consuming interest in an improved mental health program. Already his active support and his wise advice have been potent aids in our early planning. Under his administration, we have begun to establish a constructive relationship with the other departments and divisions of the state government with whom we will be working in mutual cooperation. This relationship is particularly close with the Directors of Welfare, of Health, of Public Buildings, and with the Office of the Comptroller. All these and others in the present state administration have been interested, sympathetic and helpful. I feel sure that the members of the General Assembly will want to support an improved program of mental health both individually and collectively and especially if they receive some urging from their voting constituents. No doubt it will be a part of the action of members of the Missouri State Medical Association to provide some of this urging.

Again, I am most pleased to see the newspapers of the state so active and interested in mental

Ulcerative Proctocolitis

FREDERICK B. CAMPBELL, M.D.; JOE E. HIRSCH, M.D., AND
JOHN G. CAMPBELL, M.D., *Kansas City*

NONSPECIFIC ULCERATIVE colitis, or more properly termed ulcerative proctocolitis, begins as an inflammatory disease of the rectal mucosa preceding ulceration. The course is unpredictable and the ulceration may progress orad from its frequently overlooked proctitis phase to involve the entire colon and terminal ileum. There may be varying degrees of remission and exacerbations over a period of many years. Occasionally relentless progression may occur and require emergency colectomy and permanent ileostomy. Medical treatment may be satisfactory or frustratingly inadequate.

The etiology is unknown. Diet, infection and emotional stress are influencing factors. Some cases appear to be initiated by bacillary dysentery or a proctocolitis from any cause.

In our private practice of proctology 385 cases of proctocolitis have been treated or seen in consultation. Of this number 164 cases, or 42.7 per cent, failed to involve the sigmoid. One hundred ninety patients, or 49.3 per cent, developed proctocolitis. Only 31 patients, or 7 per cent, were classified as proctosigmoiditis indicating that after the disease progresses to the sigmoid it is apt also to invade a part or all of the colon. Forty-six patients, or 11.9 per cent, were medically intractable and surgical intervention became necessary. Obvious intractability should be recognized earlier and long periods of semi-invalidism avoided. It is also well to remember that carcinoma is an additional hazard in long standing ulcerative colitis.

The initial proctitis phase, as manifested by urgency and the passage of bloody mucus, brings many of these patients to the proctologist; hence the proctologist is fortunate in having the privilege of observing all phases of this disease. Many of our patients had not had the benefit of physical examination but had been treated medically for hemorrhoids. Others, who were even more unfortunate, had had anorectal surgery, a hazardous procedure in the presence of ulcerative proctitis.

PROCTITIS

A feeling of urgency and the passage of mucus are the results of mucosal hyperemia and edema.

As pin point ulcers develop the mucus becomes blood tinged. The minute ulcers may coalesce to form larger and deeper ulcers and as larger vessels are eroded the bleeding becomes more evident even to the point of massive hemorrhage. The well-being of the patient is not otherwise affected in this early stage.

The diagnosis is easily made by sigmoidoscopic observation. X-ray examination is negative until the colon is involved. Initially one may see areas of minute purplish points which represent thromboemboli in small arterioles. Later these infarcts become abscessed and the decapitated abscesses appear as pinpoint yellow dots. When these areas are gently rubbed with an applicator, small bleeding points appear, and this is the most characteristic diagnostic feature. There is also an excess of watery mucus, possibly blood tinged. This disease may be confined to the rectum for many years, either as a chronic low grade proctitis or with remissions.

Approximately 75 per cent of all cases may be satisfactorily treated medically. The most favorable is the ulcerative proctitis group. These patients usually improve on the following medical management: a smooth nonirritating diet, prohibition of alcohol and coffee, the administration of antispasmodics and mild sedatives, the rectal instillation of Para-Nitrosulfathiozole (Nisulfazole) 10 per cent suspension and Hydrocortisone (Hy-

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Mental Health—Continued

health. An informed and supportive press is certainly a fine asset. We will continue to work in cooperative fashion with the press, television, radio and other media of public communication. These representatives—as well as all our citizens—are entitled to know what goes on in the Division and how tax dollars are spent. We welcome their interest and scrutiny and we hope to earn their continuing support.

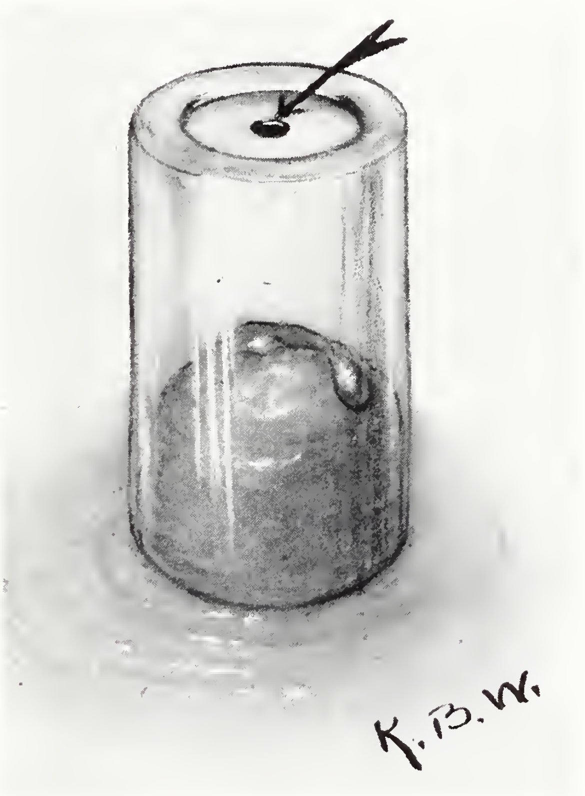
It is important for the program that the state has been able to employ both a deputy director and a director who are not only experienced and qualified psychiatrists but who are also certified mental hospital administrators. This employment was no mean accomplishment in the face of the national shortage of such people. We have come to Missouri because we felt that you had the motivation as well as the ability to support a good, sound, conservative and adequate mental health program and that you were the kind of folks we would enjoy working with.

The enormity and complexity of the job ahead does not scare us one whit. We are determined to give our best effort. But in view of your supportive resolutions, we do hope each one of you will be willing to stand up and be counted as favoring a better deal for Missouri in mental health and that you will actively work to that end.

drocortone). Usually 10 cc. of Nisulfazole to which is added 10 to 20 mg. of hydrocortone dissolved in 10 cc. water is injected after each stool. A rectal suppository containing hydrocortone is effective in some cases.

PROCTOCOLITIS

Patients in the proctocolitis group range from those who show little systemic effect of their disease to those who are critically ill. Considerable blood and mucus are lost from the hyperemic mucosa and extensive ulceration. This may result in considerable biochemical disturbance. Careful attention must be given to the treatment of the anemia, avitamosis, malnutrition and electeolyte deficiency. Oral administration of creamothaladine or azulfidine may be helpful by controlling secondary infection. Some patients have frequent passages of blood and mucus but are still obstinately constipated. These patients may respond to the laxative effect of creamosuxidine.



Steroid therapy appears to be beneficial in carefully selected cases. Abdominal distention, fever and tenderness, as present in pericolitis, and impending perforation make steroid therapy extremely hazardous.

The chronic invalid or one with acute fulminating disease may not be amenable to the most experienced medical management, and colectomy becomes mandatory.

INDICATIONS FOR COLECTOMY

Indications for colectomy follow: (1) impending or suspected perforation indicated by fever, toxicity, distention, and tenderness from peritoneal irritation of pericolitis; (2) massive hemorrhage; (3) deep perirectal fistula formation; (4) systemic manifestations—arthritis, dermatitis, iritis, myocarditis, erythema nodosa; (5) chronic invalidism and interference with earning a livelihood or comfortable living; (6) partial obstruction, and (7) suspected carcinomatous change.

Total colectomy with permanent ileostomy as a one-stage procedure is usually the treatment of choice, but if there is minimal involvement of the rectum without fistula formation, an ileoproctostomy is possible. We have been able to preserve the rectum in only one of 46 surgical cases.

The construction and management of permanent ileostomies has only recently proved entirely satisfactory in rehabilitating patients submitting to proctocolectomy. This advancement is primarily due to an improved technic for the prevention of obstruction and prolapse which have been the most annoying complications in the past. Exposed serosa of the ileal stoma lends itself to a serositis and fibrosis causing partial terminal ileal obstruction. This complication is overcome by everting the mucosa and anchoring it to the skin at the time of surgery. Obstruction of other segments of the small bowel may be minimized by closing the right lateral gutter or closing the space above the ileostomy by utilizing the falciform ligament. Prolapse is prevented by suturing a section of the cut mesentery to the parietal peritoneum.

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SUMMARY

The presently accepted methods of medical treatment of ulcerative proctocolitis have been outlined.

Surgical procedures to avoid the common postoperative complications have been given.

A suggestion for greater security of the prosthesis and protection of the stoma has been presented.

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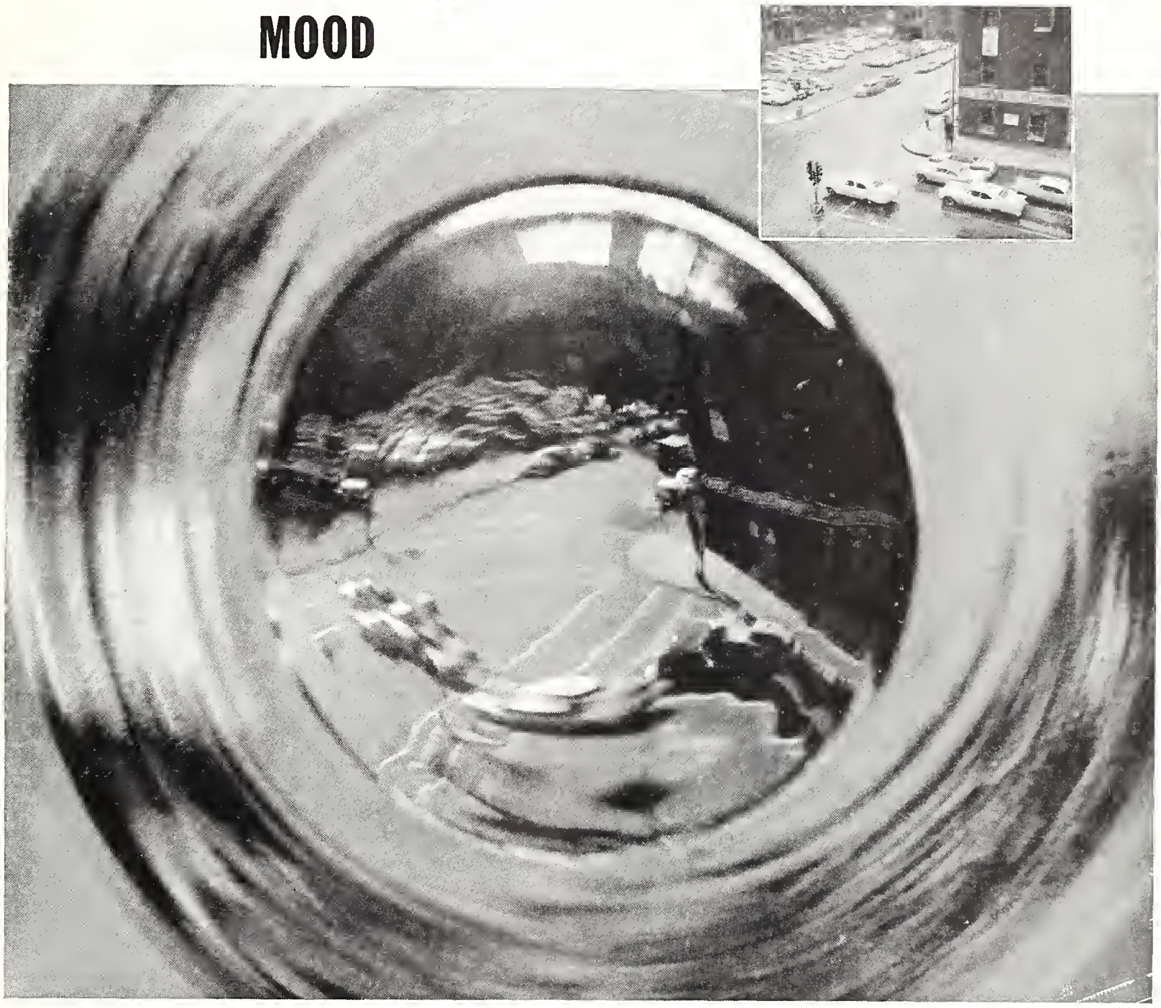

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*Pratt, R. T. C., and McKenzie, W.: Anxiety States Following Vestibular Disorders, Lancet *2*:347 (Aug. 16) 1958.

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Special Article

Social Security Disability Program

The Physician's Role

EARL L. LOYD, M.D., *Jefferson City*

DOCTORS, HOSPITALS, institutions and agencies who have contact with disabled people are frequently asked to fill out medical reports in connection with claims under the disability provisions of the social security law. These provisions protect severely disabled people in three ways:

1. Benefits are provided for insured workers aged 50 to 65 who are no longer able to work because of an extended total disability. Beginning in September, 1958, benefits could also be paid to certain of the disabled workers' dependents—namely, wives and dependent husbands who have reached retirement age, unmarried dependent children (including sons or daughters disabled in childhood), and wives, regardless of age, who have in their care children entitled to benefits.
2. Benefits can be paid to adult disabled sons and daughters of retired workers and of workers who died. To be eligible for these benefits, the disabled son or daughter must have a disability which began before age 18 and has continued uninterruptedly.
3. Disabled workers, regardless of age, can "freeze" their social security records to protect their own and their families' future benefits rights.

To qualify under these disability provisions, a person must be unable to engage in any substantial gainful activity by reason of a medically determinable physical or mental impairment which can be expected to result in death or to be of long-continued and indefinite duration. A disabled worker must, in addition, have social security credits for work in at least five out of the 10 years he became disabled and must be fully insured. The social security credits needed for a fully insured status vary from person to person depending on age. Five years of work under social security will be enough to meet the "fully insured" requirement through 1960. Anyone with 10 years of social security credits is fully insured for life.

Benefits are not payable for the first six months that a person is disabled. However, as in the case of the old-age insurance benefits, the law protects a person who delays filing his application for some time after he meets the requirements for payment (including the six month waiting period), in that it permits back payments for as much as 12 months.

Workers with long-standing disabilities have until June 30, 1961, to apply to have their social security records frozen as of the time they actually became disabled. In some cases this may be as far back as October 1941, the first date when the work requirements could have been met.

Under the social security law the benefits payable to a child ordinarily stop at age 18. When a disabled child was entitled to benefits before age 18, his benefits will be continued so long as he is disabled. Otherwise, his benefits begin when the parent on whom he is dependent becomes entitled to disability benefits (age 50-65) or to old-age insurance benefits, or dies, regardless of the child's age at that time. In contrast to the applicant for disability insurance benefits or for a "freeze," the disabled child does not need a record of work under social security. The disabled child must, however, meet the same definition of disability as disabled workers. The mother of the person receiving this type of benefit may qualify for a mother's benefits if she has the disabled son or daughter in her care.

All applicants whether for benefits or for the freeze, are referred to their State vocational rehabilitation services. Payments to the disabled worker and his eligible dependents are suspended, if the disabled worker refuses, without good cause, to accept available rehabilitation services. On the other hand, if the disabled worker accepts the rehabilitation services and performs work pursuant to an approved state vocational rehabilitation program, benefits may continue for as much as 12 months after he starts that work.

Application under the social security disability provisions are taken by the 584 social security district offices, located in communities all over the Nation. The social security district office gives the disabled applicant information about his rights, helps him to fill out his application, and advises as to the proofs and documents he may need to support that application. Under the law, the disabled person is responsible for furnishing, at his own expense, the evidence to show that he is "disabled" within the meaning of the social security law.

His social security district office gives him one or more copies of a medical report form on which this evidence can be supplied. He is asked to take or mail this form to his attending physician or to a hospital, institution, public or private agency where he has been treated for his disabling condition. This report form, designed as a guide for the reporting physician, lists the kind of medical facts essential for the determination of "disabil-

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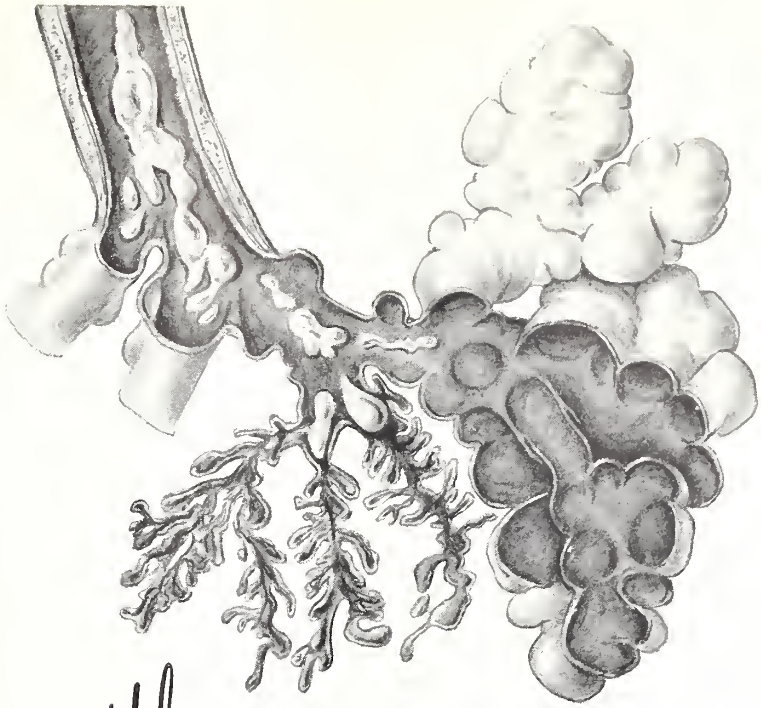
Chief Medical Consultant, Section of Vocational Rehabilitation of State Department of Education, Jefferson City, Mo.



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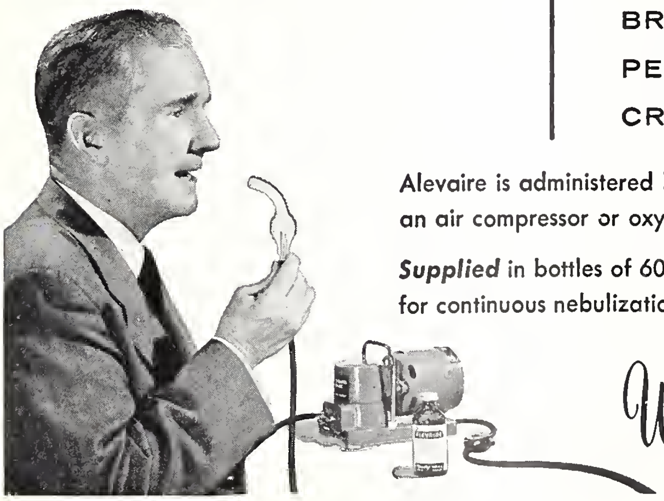

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ity." However, the reporting doctor is not required to use it; if he prefers, he may make his report in the form of a narrative summary or he may submit photocopies of the pertinent medical records. The completed reports are to be returned by mail to the social security district office (or to a state agency, if indicated).

By providing a full and objective clinical picture of his patient, the reporting doctor fulfills his responsibility to his patient and, incidentally, expedites the decision. To be of maximum use for the evaluation of a patient's capacity for work, the report should include a history of the impairment, the symptomatology, clinical findings and diagnosis. It should be noted that the attending physician is asked only to provide this type of objective medical data. He is not put in the position of having to decide the issue of "disability." The determination as to whether a patient is "disabled" must be made within the scope of the social security law; often it is based on evidence from more than one medical source. Also the determination must take into account factors which are not purely medical—factors such as education, training and work experience.

After the applicant has filed his claim under the disability provisions, and furnished the supporting evidence, his case is forwarded by his social security district office to an agency of his state—usually the state vocational rehabilitation agency. Under agreements between the individual states and the federal government, these state agencies make the disability determinations for their own residents.

In the State of Missouri, the agreement with the federal government provides for the Section of Vocational Rehabilitation, State Department of Education, Jefferson City, to make these disability determinations.

The evaluation of disability is made by a "review" team in the state agency. There are at least two professional people on each team. One of the two is a doctor of medicine (often a practicing physician who serves with the state agency on a part-time basis); the other is trained in evaluating the personal and vocational aspects of disability. The team must decide whether the applicant is sufficiently disabled to prevent him from engaging in any substantial gainful activity within the foreseeable future.

In many cases it is necessary to write back to the reporting physician because the medical report does not contain enough clinical facts. As a rule, the kinds of medical facts that the attending physician needs in making his diagnosis and in treating his patient are the same as those required to evaluate the severity of impairments in disability programs. However, certain medical facts are more highly significant in disability evaluation than to medical management of the case. To evaluate the effect of the impairment on the individual's ability to work requires the kind of medical evidence that confirms the diagnosis and measures remaining functional capacities of mind and body. By furnishing complete and objective evidence, the reporting physician makes it unnecessary for the reviewing physician to write back for additional clinical or laboratory data.

Where the medical evidence initially submitted indicates a reasonable likelihood that the applicant is disabled, but more precise clinical or laboratory findings are needed to arrive at a sound decision, or to resolve conflicts in the evidence, a consultative examination (usually at the specialist level) may be ordered to obtain additional information. Selection of consulting physicians and payment of fees are governed by state practices.

Some doctors feel that they should be reimbursed by the government for the cost of preparing the medical reports on their patients, and it is, of course, quite within their prerogative to charge the patient a fee for that service. However, under the law, the Social Security Administration cannot pay that fee; that is the individual's responsibility.

Other doctors are perturbed when asked to complete medical reports for individuals whom they may not have seen for years. In these cases, however, the physician is not expected to describe the present condition of the patient, but his medical condition as of the time he made his last examination.

The central purpose of disability evaluation is to determine remaining mental and physical capacities. To determine: (1) what the claimant has left, and (2) what he can do with what he has left.

A realistic evaluation of disability must be based on clinical and laboratory tests of the individual's ability to meet the metabolic demands of activity, to reason, to perceive and to perform certain basic activities such as sitting, standing, bending and walking. When incapacity results from severe impairment of one or more such functions, it is essential to establish not only the fact that functional impairment exists, but also its extent.

CONCLUSION

In developing evaluation guides for the use of state agencies and its own technical professional personnel, the Social Security Administration has had the continuing cooperation of a Medical Advisory Committee composed of recognized specialists associated with medical and allied professions in various fields outside government, such as general practice, research, medical education, industry and labor.

The American Medical Association has taken steps to inform its members about the medical aspects of the disability program, especially the preparation of medical reports. On June 1, 1957, *The Journal of the American Medical Association* carried a comprehensive report on the administration and organization of the disability provisions. Regulations on the meaning of disability appeared in the September 28, 1957, issue.

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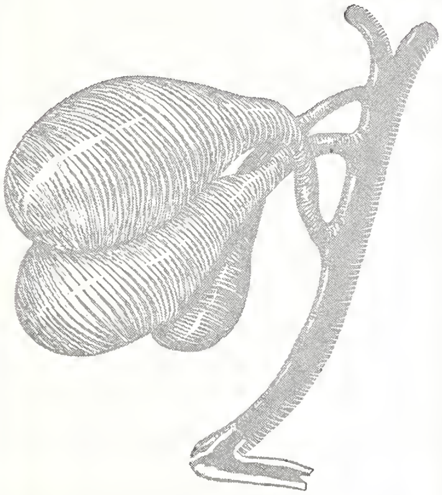
Source: Skilboe, B.: Am. J. Clin. Path. *30*:252, 1958.



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(1) Beckman, H.: Drugs: Their Nature, Action and Use, Philadelphia, W. B. Saunders Company, 1958, p. 425.
(2) Biliary Tract Diseases, M. Times *85*:1081, 1957.

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President's Page

All of us know that increasing costs are posing serious problems for the medical schools of the nation. The concern of the medical profession over the growing seriousness of the financial plight of medical schools resulted in 1951 in the establishment by the American Medical Association of the American Medical Education Foundation (AMEF).

October is "Missouri AMEF Month." During this month, I hope every one of us will demonstrate with a generous gift his loyalty to our profession and his concern for the future of medical education.

Ralph Perry, M.D.

There is evidence of an increasing trend by government to subsidize medical schools. A composite study prepared for the annual meeting of state chairmen of AMEF last January disclosed that government funds for teaching and research provided 45.8 per cent of all medical school expenditures during 1957-58. This figure includes federal funds amounting to 27.9 per cent and state funds totaling 17.9 per cent of all expenditures.

It must be obvious that, if the trend toward reliance on tax dollars for the support of medical education goes much further, the integrity and independence of our schools are bound to come under the growing threat of government influence and direction. The alternative is to find means of providing the necessary funds from private sources.

Surely it is up to doctors themselves to take the lead in making this alternative effective. The doctors of Missouri have not yet begun to do the job they must do. Last year only about one third of Missouri's 3,800 physicians contributed either to their own schools or to the AMEF. Elsewhere in this issue of Missouri Medicine, Dr. James P. Murphy, St. Louis, state chairman for the foundation discusses in some detail the shortcomings of last year's AMEF campaign in Missouri and the need for us to do much better this year.

Leaving aside for the moment gifts made by 1,077 Missouri doctors directly to their own schools, fewer than 240 physicians in the state gave to the campaign. The total received by AMEF, as such, was only $8,049, and even this modest amount included $2,843 raised for AMEF by the Woman's Auxiliary.

When it is recognized that AMEF last year made grants totaling $36,204 to Missouri's three medical schools, it becomes clear indeed that our schools are, in effect, being subsidized by contributions of the medical profession in other states. In this October's campaign I know we shall correct this state of affairs.

What the generosity of Missouri doctors really can be is apparent in the $55,475 contributed last year by 1,077 individual doctors of the state directly to their own schools. This was an average gift of more than $51 by each doctor. If the other two thirds of the doctors of the state who gave nothing last year, either directly to their schools or to AMEF, would all try to hit this average mark in gifts to AMEF during this October, we should make an outstanding record for the profession in Missouri.

Or, as Dr. Murphy suggests, if each of us would set aside the equivalent of the fee from just one office call a month and make this the amount of his contribution to AMEF during the October campaign, we could truly say the medical profession in Missouri is doing its part for the effectiveness and freedom of medical education in America.

Ralph Perry

EDITORIALS

American Medical Educational Foundation

It is no secret that the medical profession in Missouri has done something less than a creditable job of supporting the annual campaign of the American Medical Educational Foundation to provide urgently needed funds for our medical schools. We who have worked on the state AMEF committee believe that the fault may be in the way we have managed our past campaigns, and this year we are making a special effort to bring this fundamentally important appeal directly to the attention of every doctor in a concentrated campaign that will wind up successfully within the month of October.

It is not, I know, necessary for me to labor the reasons that make AMEF fund-raising necessary. We know that medical education is expensive, and we know why it must be. We know that, if means cannot be found for broadening the base of private financial support of medical schools, the needed funds will have to come increasingly from government, and particularly from the federal government. We know the dangers of this in the long run not only to medical education, but to medical practice. We know that we, as doctors, have the responsibility to lead the way. If we do not give, and give generously, to our own schools and through our own American Medical Education Foundation, how can we expect others—particularly the business community—to meet the need?

All the reasons why we should support AMEF are perfectly clear. It is also clear, I think, that most physicians have the means to do so. Medicine has been good to most of us in Missouri.

What we need, then, is a campaign, a concentrated effort, that will get the job done. This year in October—Missouri AMEF Month—we are going to have such a campaign. A direct letter of appeal will go to every doctor. The president of every constituent society of MSMA has been asked to see that the AMEF campaign has a place of prominence on the society's meeting program during the month. We have been promised again the help of Woman's Auxiliary throughout the state in raising money for AMEF in October. Our MSMA President has written for this issue of Missouri Medicine a strong statement of support.

My purpose in this brief article is to point out some of our strengths and weaknesses in past campaigns and to urge every reader of the Journal to do his personal best to support the effort this year.

There are bright and dark sides to last year's record, as Dr. Perry points out on his President's Page in this issue.

Let's look at the bright side first. Throughout the state 1,077 doctors contributed a total of $55,475 directly to their own alma maters. This is a creditable showing, though there is a very real need for each of these generous doctors who can possibly do so to be even more generous this year. If this basic group of contributors—about one third of the membership of MSMA—could increase their average gift from the $51 of last year to an average $100 this year, our state showing would be excellent indeed.

I should emphasize that there is no wish on the committee's part to ask any doctor to give more than he can reasonably afford. The committee does feel, however, that each doctor's tax-deductible gift to medical education should be a major and serious item in his budget for contributions.

Now for a glance at the dark side. Just about two thirds of the doctors of the state—according to available records—gave nothing to medical education, either directly to their own schools or through AMEF. Total contributions to AMEF as such amounted to only $8,049, of which about one third, or $2,843, was gifts obtained by the Auxiliary.

Our real need in Missouri is for the participation of more doctors. Some state medical associations have achieved this by assessments for AMEF billed to the doctor with his state society dues. We in Missouri have rejected such a solution to the problem, because we feel that the program should freely reflect the voluntary interest of doctors in the support of medical education.

In summary, then, we shall have an AMEF campaign concentrated in the month of October. Every doctor will be asked to give directly by mail. Tax-deductible contributions may be made to AMEF for distribution as unrestricted gifts of the foundation among the nation's medical schools; or gifts may be earmarked by the donor, and AMEF will send every dollar to the school he designated; or a doctor may, if he prefers, send his check directly to his own alma mater.

In any case, our need in Missouri is for more gifts and for larger ones. The committee would like to suggest that it might be realistic—and it would certainly be generous—for many doctors to figure what would be their total annual income from 12 typical office calls—one call a month—and make this the amount of their contribution.

I hope every doctor will mail his check in promptly when he gets the AMEF solicitation letter and that we may make our 1959 campaign a 100 per cent success, with each of us doing his share.

James P. Murphy, M.D., *Chairman*
AMEF Committee

Musings of the Field Secretary

We hear and read a good deal about school health programs these days. It's not too difficult to sit behind a desk and write what appears to be a good school health program. This would include among other items examinations of all preschool youngsters by their family physician plus immunizations, up-to-date health records maintained by the school, periodic health screening and physician examinations of school children, school safety measures, teaching of health education, physical education programs, first aid facilities and a cooperative, working relationship on school health problems between the school and local physicians.

Making a school health program work is the big problem. This entails far more than putting on paper a suggested program. To work, such a program must first be developed to fit the local situation. Local needs, finances, facilities, training personnel, customs, prejudices, and leadership are factors which will greatly influence the scope and effectiveness of any school health problem. Leadership, as exerted through the school administrator, is vital to the development and successful operation of such a program.

In too many situations local medical societies and school administrators, for various reasons, have not worked together in trying to develop and promote a sound functioning school health program. This may be partly because neither party has assumed the initiative in inviting the other for a get-together discussion of the matter. Which comes first, the chicken or the egg? Who should initiate the get-together? What difference does it make just so it is done? A local medical society school health committee may well serve the entire community by inviting the school administrator or administrators to a meeting of the committee or society where school health is the subject for consideration. This same committee may also wish to offer by letter or personal contact its assistance to these school administrators in furthering better health for school-age children.

The Committee on Infant and Child Care of the Missouri State Medical Association is concerned with promoting better working relationships between school administrators and county medical societies. The committee feels that it is most important for county medical societies to have functioning school health committees. It is hoped that these committees will take the initiative in offering their assistance to the local school people in the development and operation of school health programs.

A state level planning group for better school health programs in Missouri was formed last spring and has held two meetings to date. Personnel of this planning group include Commissioner Hubert Wheeler of the State Department of Education and other members of his Department; H. M. Hardwicke, M.D., Acting Director, Missouri Division of Health, and other representatives of his Department; a representative of the Missouri Dental Association; a representative of the Missouri Congress of Parents and Teachers; and representatives of the Missouri State Medical Association Committee on Infant and Child Care, Dr. Eugene Schwartz, Springfield, Dr. Jack Wiles, West Plains, and Dr. Guy Magness, University City.

Through arrangements made by Commissioner Wheeler of the State Department of Education, representatives of this state level school health planning group appeared on the program of the eleventh annual Workshop of the Missouri Association of School Administrators on Thursday, June 25, 1959, held at the University of Missouri. More than 400 school administrators over the state were in attendance. Dr. Eugene Schwartz, Chairman, Committee on Infant and Child Care of the State Medical Association, spoke before the workshop and discussed the need for cooperative endeavors, on the part of school people and local physicians through their medical societies, in effectively handling school health problems. Dr. Schwartz suggested that the school administrators contact their local medical societies and seek their assistance in the setting-up and carrying-out of school health programs. He cautioned them not to depend on doctors or medical societies to make the first move in this respect.

The 7th National Conference of Physicians and Schools will be held October 13-15, 1959, at Moraine-on-the-Lake Hotel, Highland Park, Illinois. The theme of this year's conference is "Significant Issues in School Health and Physical Education." The Department of Health Education of the American Medical Association is the sponsor of this National Conference. Representatives from the Infant and Child Care Committee of the Missouri State Medical Association will attend the Conference.

TRANSFER OF TUBERCULOSIS LABORATORY WORK

All laboratory work for studies of tuberculosis previously performed at the branch and central Division of Health laboratories was transferred to the Missouri State Sanatorium at Mount Vernon, effective September 1, 1959, according to H. M. Hardwicke, M.D., Acting Director of the Missouri Division of Health. Submission of tuberculosis specimens and requests for mailing containers should be directed to the Sanatorium and physicians are requested to change the mailing address on containers that they may have on hand.

CASE HISTORY OF AN ARTHRITIC

Age: 55 Sex: Male Race: White

Diagnosis: Rheumatoid arthritis.

Previous Therapy:
40 mg. triamcinalone per day.

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Current Therapy: ARTHROPAN Liquid.

Results: The patient improved on ARTHROPAN and "...is now on Choline Salicylate [ARTHROPAN] alone and has returned to work."[1]

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174 mg. of Choline Salicylate.
Each teaspoonful (5 ml.) contains 870 mg.
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1. Clark, G.M.: Personal Communication, 1958.

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News—Personal and Professional

Recently appointed to the medical committee of the Tuberculosis and Health Society of St. Louis were **I. J. Flance**, M.D., and **David N. Kerr**, M.D., St. Louis.

The Cape Girardeau *Southeast Missourian* and the *Sikeston Standard* carried articles about **Thomas C. McClure**, M.D., Sikeston, on the completion of forty years of the practice of medicine.

An American Medical Association medical quackery program was presented at a July noon meeting of the Marshall Rotary Club by **G. A. Aiken**, M.D., Marshall, program chairman for the group.

The new medical advisor for the Selective Service Board of Perry County is **A. E. McDermott**, M.D., Perryville, who was appointed to fill the place of Jerome J. Bredall, M.D., resigned.

The history of the Ellis Fischel State Cancer Hospital, Columbia, was told the Kiwanis Club of Mexico recently by **Ned D. Rodes**, M.D., Mexico.

"Mental Health Is Everybody's Business" was the subject used by **Addison M. Duval**, M.D., Jefferson City, in addressing a recent meeting of the Jefferson City Rotary Club.

The annual Red Cross meeting in Mount Vernon, held in July, was addressed by **Stanley S. Peterson**, M.D., Springfield.

Among members of the 70 member committee to represent Missouri at the White House conference on aging to be held in Washington in January of 1961, Governor James T. Blair appointed Drs. **H. M. Hardwicke** and **Addison M. Duval**, Jefferson City; **David Littauer** and **William B. Kountz**, St. Louis.

The seventh annual meeting of District VII of the American College of Obstetricians and Gynecologists was held in St. Louis September 17-19.

"The Art of Mental Relaxation" was discussed by **John E. Burch**, M.D., Joplin, at a meeting of the Jasper County Medical Secretaries and Assistants Society in July.

At the annual meeting of the Henry County American Red Cross Chapter held in Clinton on July 17, **Stanley S. Peterson**, M.D., Springfield, was the speaker.

At the annual meeting of the American College of Cardiology in Philadelphia, **Albert M. Estes**, M.D., Cape Girardeau, was inducted as a fellow of the organization.

Governor Blair recently appointed **Carl M. Peterson**, M.D., Kansas City, as a member of the board of curators of Lincoln University.

The International Congress of Radiology's top award for 1959 was presented to **Edward C. Ernst, Sr.**, M.D., St Louis, during a meeting held in Munich, Germany, July 23-30. The award was for an exhibit on radium treatment of cancer of the uterus.

A new hospital building for the Memorial Hospital at Harrisonville was discussed by **O. B. Barger**, M.D., Harrisonville, before the Kiwanis Club recently.

The American Association of Industrial Nurses has selected **William L. Macon, Jr.**, M.D., St. Louis, as a member of their Medical Advisory Committee.

Morris Ziff, M.D., professor of medicine of the University of Texas Southwestern Medical School, will be the guest speaker at the Menorah Medical Center's annual A. Morris Ginsberg Memorial Seminar to be held at the center in Kansas City on November 4 and 5.

Emotional problems in children was discussed by **A. H. Chapman**, M.D., Kansas City, at the Missouri State Teachers College, Kirksville.

The breakfast division of the Optimist Club of Sedalia recently elected **Donald C. Proctor**, M.D., Sedalia, as president.

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State Board Held Last Meeting

The State Board of Medical Examiners held their last meeting on August 15, 16 and 17 in St. Louis. The first meeting of the board was held August 5, 1946. The members of the original board were Drs. Howard Goodrich, Walter S. Sewell, W. O. Finney, Harry A. Klein, Paul Knepper and Edwin C. White. Three of these original board members were on the board at the last meeting, Drs. Sewell, Klein and Finney. Dr. Finney has served on the board continuously from the time it was formed until it ended its career on August 29, 1959.

During this period the following men served on the board: Drs. Howard Goodrich, Walter S. Sewell, W. O. Finney, Harry A. Klein, Paul Knepper, Edwin C. White, F. T. H'Doubler, W. L. Brandon, Edwin Schmidtke, William J. Shaw, Elvin D. Imes, Duff S. Allen, James W. Willoughby, Edwin F. Vitt and G. R. Wempe. Three of these doctors have died, Drs. Edwin C. White, Edwin Schmidtke and Duff S. Allen.

In the time of the work of this board the total number of doctors licensed was 3,947, 2,304 by examination and 1,643 by reciprocity. Endorsements to other states numbered 2,750.

Missouri Medical Meetings

Missouri State Medical Association, St. Louis, March 13, 14, 15, 16, 1960.

Mississippi Valley Medical Society, St. Louis, Sept. 30-Oct. 1, 1959.

Kansas City Southwest Clinical Society, Kansas City, Oct. 5-8, 1959.

Missouri Academy of General Practice, 10th Annual Assembly, Chase Hotel, St. Louis, Nov. 7-8, 1959.

St. Louis Pediatric Society—second Thursday of each month, September through May at Medart's Restaurant, 8:00 p.m.

Component Society Meeting Dates

Audrain County Medical Society—third Monday of each month.

Barton-Dade County Medical Society—third Wednesday of each month.

Benton County Medical Society—meets only on call.

Boone County Medical Society—first Tuesday of each month.

Buchanan County Medical Society—first Wednesday of each month.

Butler-Ripley-Wayne County Medical Society—first Wednesday of each month.

Callaway County Medical Society—third Thursday of each month.

Cape Girardeau County Medical Society—first Monday of each month.

Chariton-Macon-Monroe-Randolph County Medical Society—second Thursday of each month September through May.

Clay County Medical Society—last Tuesday of each month.

Clinton County Medical Society—meets only on call.

Cole County Medical Society—fourth Tuesday of each month.

Cooper County Medical Society—first Monday after the 15th of each month.

Dallas-Hickory-Polk County Medical Society—first Wednesday of each month.

Dunklin County Medical Society—third Tuesday of each month.

Franklin-Gasconade-Warren County Medical Society—last Tuesday of each month at the St. Francis Hospital, Washington, at 12:30 p.m.

Grand River Medical Society (Caldwell-Carroll-Livingston, Grundy-Daviess, Harrison, Linn, Mercer, DeKalb)—second Thursday of each month.

Greene County Medical Society—fourth Friday of each month.

Henry County Medical Society—meets only on call.

Holt County Medical Society—meets only on call.

Howard County Medical Society—meets only on call.

Jackson County Medical Society—March, May, October and December.

Jasper County Medical Society—second Tuesday of each month, September through May.

Jefferson County Medical Society—meets third Friday of each month.

Johnson County Medical Society—meets only on call.

Lafayette-Ray County Medical Society—second Tuesday of each month at 7:30 p.m., at the Victory Cafe, Lexington.

Lewis-Clark-Scotland County Medical Society—meets only on call.

Lincoln-St. Charles County Medical Society—third Thursday of each month.

Marion-Ralls-Shelby County Medical Society—fourth Tuesday of each month. 7:30 p.m.

Mid-Missouri County Medical Society (Phelps-Crawford-Dent-Pulaski-Maries-Laclede)—fourth Thursday of each month.

Miller County Medical Society—meets only on call.

Mineral Area County Medical Society (St. Francois-Iron-Madison-Washington-Reynolds-Ste. Genevieve)—fourth Thursday of each month.

Moniteau County Medical Society—second Thursday of each month.

Nodaway-Atchison-Gentry-Worth County Medical Society—first Monday in February, April, October and December.

North Central Counties Medical Society (Adair-Schuyler-Knox-Sullivan-Putnam)—meets only on call.

Ozarks Medical Society (Barry-Lawrence-Stone-Christian-Taney-Newton-McDonald)—second Tuesday of each month September through June.

Pemiscot County Medical Society—third Thursday of each month.

Perry County Medical Society—second Thursday of each month.

Pettis County Medical Society—third Monday each month September through May.

Pike County Medical Society—third Tuesday of each month.

Platte County Medical Society—meets only on call.

St. Louis County Medical Society—second and fourth Wednesday of each month.

St. Louis Medical Society—third Tuesday of each month October through May.

Semo County Medical Society (Stoddard, New Madrid, Mississippi, Scott)—third Wednesday of each month September through May.

South Central Counties Medical Society (Howell-Oregon-Texas-Wright-Douglas-Ozark)—fourth Wednesday of each month.

Webster County Medical Society—meets only on call.

West Central Missouri Society (Bates-Cass-St. Clair-Vernon-Cedar)—second Thursday of each month.

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For generations without number wine has been extolled as an "effective stimulant" and, therefore, valuable aid to treatment in various types of cardiovascular disease. It was this peculiar property, no doubt, which prompted the poet, Salerno, some 800 years ago to write—"Sound wine revives in age the heart of youth."

Now, as a result of modern research, we are obtaining concrete evidence of the favorable physiologic action of wine to lend support to the empiricism of ancient usage.

Both brandy and wine in moderate quantities have been found to substantially increase the pulse rate and step up the stroke volume of the heart.

Wine has been found to aid drug therapy in relieving the pain of angina pectoris and obliterative vascular disease.

Moreover, aside from the purely hypotensive actions of wine, its unquestionable euphoric effects help counter the depression, apprehension and anxiety so frequently present in sufferers from heart and coronary disorders.

The beneficial actions of wine appear to transcend those of more concentrated alcoholic beverages—valuable cardiotonic properties having been attributed to the aliphatic aldehydes and other nonalcoholic compounds recently isolated from certain wines and grape varieties.

It goes without saying that the use of alcohol, even in the form of wine, is contraindicated in hypertension accompanied by certain types of renal disease.

For a discussion of the many modern Rx uses for wine, write for the brochure, *"Uses of Wine in Medical Practice"* to Wine Advisory Board, 717 Market Street, San Franciscio 3, California.

From the Medical Schools

WASHINGTON UNIVERSITY

Staff Changes

Two Washington University School of Medicine staff members have been granted a year's leave of absence to conduct research in Europe, Dean Edward W. Dempsey has announced. Dr. Roy Peterson, assistant professor of anatomy, left for Cambridge, England, in September, where he is working in the laboratory of Prof. J. Dixon Boyd at the University of Cambridge. His research involves the endocrine glands, particularly the pituitary gland. Dr. Peterson's wife and four children accompanied him. Their St. Louis home at 421 Elliott is occupied by Dr. Ernani Braga of the Rockefeller Foundation, Rio de Janeiro, who is a visitor in the department of preventive medicine for one year.

Since late July, Dr. Harlan Spjut, assistant professor of pathology and of surgical pathology, has been conducting bone research at the Karolinska Institute in Stockholm, Sweden. Dr. and Mrs. Spjut and their five children are living in a villa near Stockholm. Replacing Dr. Spjut on an exchange basis is Dr. Bo. I. Tornberg of the Karolinska Institute. He has been appointed visiting assistant professor of surgical pathology at the medical school and is working with Dr. Lauren V. Ackerman, professor of pathology and head of the division of surgical pathology.

In September, Dr. Sam L. Clark, Jr., assistant professor of anatomy, returned to the medical school after a year's leave-of-absence in London. Dr. Clark has been working with Dr. J. H. Humphrey at the National Institute for Medical Research to determine how immunological aspects of body cells and tissues affect growth development. While in London, Dr. and Mrs. Clark and their three children lived in the home of Dr. A. M. Lawn, who was a visiting professor of anatomy at Washington University Medical School. Dr. Lawn, his wife and family resided in the Clark home at 907 Volz Drive, Webster Groves. In September, they returned to London, where Dr. Lawn is lecturer in physiology at the Royal Veterinary College.

Visitors

Eleven fourth year medical students from the University of El Salvador School of Medicine, San Salvador, Central America, toured laboratories and examined facilities of Washington University Medical School in August. The tour was sponsored by the State Department. The group also visited Tulane Medical School in New Orleans and Vanderbilt University School of Medicine, Nashville, Tenn. They traveled by bus with two U. S. Government interpreters as guides.

Fees Authorized

Barnard Free Skin and Cancer Hospital, 600 S. Kingshighway, may charge patients who are able to pay for treatment, Circuit Judge David J. Murphy ruled in July. The hospital had petitioned the circuit court to construe the deeds of gift and the will of the late George D. Barnard and his wife Mary, so that it could charge patients able to pay. Under the deeds of gift of 1909, income from the Barnard trust fund would cease if the hospital charged patients. As a result of this restriction the hospital said in its petition it had been forced to eliminate 21 of its 40 beds because the expense of treating patients has quadrupled without a proportionate increase in income from the trust fund and other sources. The trust fund provided 54 per cent of the hospital's expenses in the early years, but now covers only 10 per cent, it was reported.

In his ruling, Judge Murphy held that the hospital may charge those able to pay "provided it gives free care, treatment and hospitalization to indigent persons to the extent that there is income available for such purposes." Attorneys for the hospital emphasized that the institution will remain free and will give priority to indigent patients. The ruling will pave the way for reopening the 21 beds, the attorneys explained. Barnard Hospital became affiliated with Washington University School of Medicine in May 1950 and moved from Theresa and Washington avenues to the present site.

New Grants

The Washington University School of Medicine has been awarded $5,060 for heart research by the Life Insurance Medical Research Fund. The grant will be used by Dr. H. Mitchell Perry, Jr., in the study of cardiovascular disease, particularly hypertension. The United States Public Health Service has granted Washington University School of Medicine $68,250 to be used on a matching basis for the purchase of research equipment. The equipment will be used in the new David P. Wohl, Jr., Memorial-Washington University Clinics Building now under construction adjacent to the Wohl Memorial Hospital at the medical center. Dean Edward W. Dempsey said the grant will be matched with funds on hand or through private donations to the school. It is expected the new clinic and research structure will be completed in January, 1961.

Eye Bank Sub-Stations

A series of Eye Bank sub-stations are being established in 14 cities in Missouri and Illinois to help speed donations to the Eye Bank of the Washington University School of Medicine. The first

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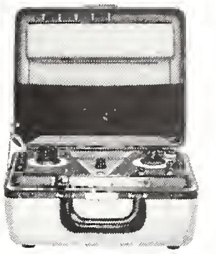

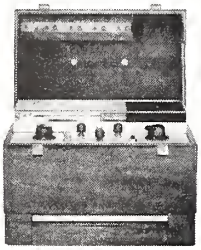

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such sub-station is in operation at the Warrensburg, Missouri, Medical Center. Other hospitals where plans are being made to establish sub-stations include the following in Missouri: St. Joseph's Hospital, St. Charles; Levering Hospital, Hannibal; St. Mary's, Jefferson City; St. Vincent's, Monett; St. Joseph's, Boonville; Bonne Terre Hospital Association, Bonne Terre; Freeman Hospital, Joplin; State Hospital No. 1, Fulton; Woodland Hospital and Clinic, Moberly, and Missouri State Sanitorium, Mount Vernon. Arrangements also are being made at three Illinois hospitals: Fairfield Memorial Hospital, Fairfield; Alton Memorial, Alton, and St. Mary's, Centralia.

UNIVERSITY OF MISSOURI

Trips and Talks

Dr. Herbert S. Goldberg, associate professor of microbiology, attended the Gordon Research Conference on Microbial Deterioration held in New Hampton, New Hampshire, July 19-24.

During the month of July, Dr. Harold M. Haugen, assistant professor of obstetrics and gynecology, attended a Denver Residents' Reunion Meeting and presented "Role of the Preoperation Intravenous Pylograms Prior to Elective Gynecological Surgery."

Dr. Joseph E. Flynn, professor and chairman of the Department of Pathology, and Dr. M. Pinson Neal, professor emeritus of pathology, attended the Mid-summer Annual Meeting of the Missouri Society of Pathologists held at the University of Missouri Medical Center on July 19. Dr. Neal was elected as the first "Honor Member" of the Society and awarded a citation in recognition of his service to pathology and medicine in the State of Missouri.

Dr. Robert L. Jackson, professor and chairman of the Department of Pediatrics, participated in a conference on "Cerebral Palsy" held in Columbia on July 27 and 28 and sponsored by the University of Missouri College of Education, the Division of Continuing Education and United Cerebral Palsy Association of Missouri. Dr. Jackson participated in a panel discussion on "Aspects of Medical Diagnosis and Treatment of the Cerebral Palsied."

Dr. Fikri Melik Hanna, assistant professor of pediatrics, attended a meeting of the International Pediatric Society July 19-25, held in Montreal, Canada. during which time he participated in the discussion of several papers. Dr. Hanna reports that at this meeting he received first-hand information about present projects in pediatric research, particularly in the fields of nutrition and problems of the neonate.

Dr. Wesley S. Platner, professor of physiology, attended a meeting sponsored by the National Academy of Sciences—National Research Council, held in Buenos Aires, Argentina, August 9 through 15. At this meeting Dr. Platner presented a paper on "The Effects of Hypothermia in Carbohydrate Metabolism" and served as a panel member in a symposium on Acclimatization.

Dr. Hugh E. Stephenson, Jr., professor and chairman of the Department of Surgery, spoke before a meeting of the Southwestern Missouri Chapter of the Missouri Academy of General Practice in Springfield on June 21. Dr. Stephenson spoke on "What's New in Surgery" as part of a symposium on Medicine, Surgery and Office Management.

Dr. John Buesseler, associate professor of ophthalmology, spoke at the same meeting on "Glaucoma Detection."

On July 20 and July 21, Dr. Stephenson along with Mr. B. J. McClatchey, technician, and Mr. James Turner of the Experimental Shop, visited the Pemco Company, in Cleveland, Ohio, to study and view the Kay Cross Rotating Disc Oxygenator.

On July 23, Dr. Kenneth Keown, professor of anesthesiology, spoke before a meeting of the Mid-Missouri Medical Society in Rolla, on "Resuscitation of Infants Following Vaginal and Cesearean Section Deliveries."

Dr. John Landor, assistant professor of surgery, spoke on "Vagotomy in Treatment of Duodenal Ulcer" to the CEMO Chapter of the American College of Surgeons meeting held at Hathman House, Columbia, on June 24.

Guest lecturer in the Department of Surgery on June 17 was Dr. J. Eugene Lewis, St. Louis, who also conducted Grand Rounds during his visit here. Other guests in the Department of Surgery during the past several weeks included Dr. R. W. Paul Mellish, of Children's Hospital of Philadelphia, Pennsylvania; Dr. James O. Davis, of the Heart Institute of the National Institutes of Health, and Dr. Carl Almond, of the Good Samaritan Hospital in Los Angeles, California.

Gifts and Grants

A grant for $8,165 has been awarded by the National Institutes of Health to Drs. B. A. Westfall, professor and chairman, Dallas K. Meyer and Wesley S. Platner, professors, in the Department of Physiology-Pharmacology for continuation of their work on free and bound cardiac glycogen.

Dr. James E. Randall, associate professor of physiology and biophysics, has been awarded a grant of $5,750 by the National Institutes of Health. The grant will provide for a continuation of his study on the stochastic properties of the vascular system.

Dr. Akgun Sayman, research assistant in cardiology, has been awarded a $3,600 fellowship for the study of electrocardiographic manifestations of low serum magnesium.

New Appointments

Dr. Addison M. Duval was appointed clinical professor of psychiatry, effective July 1. Dr. Duval received his M.D. in 1929 at the Medical College

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Dr. Ian Murchie Thompson has been appointed associate professor of surgery (urology) as of September 1. Dr. Thompson received his A.B. degree in 1943 from Columbia University and his M.D. in 1947 from New York Medical College. He has been professor of surgery at the University of Michigan, School of Medicine, Ann Arbor, Michigan.

Dr. Carl Herman Almon was appointed assistant professor of surgery beginning September 1. Dr. Almond received his B.A. in Chemistry in 1949, and his M.D. in 1953 both from Washington University. He was an instructor in surgery at the University of Southern California at Los Angeles.

Dr. Alfred Karl Baur has been appointed clinical assistant professor of psychiatry effective July 1. Dr. Baur received his B.A. in 1935 and his M.D. in 1939 from Washington University. Dr. Baur is now affiliated with State Hospital No. 1 in Fulton.

Dr. Louis Belinson has been appointed clinical assistant professor of psychiatry, effective July 1. Dr. Belinson received his B.A. in 1930 from Wisconsin University, and his M.D. in 1935 from Rush Medical College.

Dr. Francis John Tartaglino has been appointed clinical assistant professor of psychiatry. Dr. Tartaglino received his B.S. in Medicine from Georgetown College, and his M.D. in 1928 from Georgetown University Medical School, Washington, D.C.

Dr. Charles H. White has been appointed clinical assistant professor of anesthesiology, commencing September 1. Dr. White received his B.A. in 1926, and his B.S. in 1927 from University of Missouri, and his M.D. in 1930 from Northwestern University. He is at present in private practice in Mission, Kansas.

SAINT LOUIS UNIVERSITY

Appointments

Dr. George L. Curran has been appointed associate professor of internal medicine at the Saint Louis University School of Medicine. He formerly was associated with the University of Kansas School of Medicine where he was associate professor of medicine and gerontology and a staff physician at the University of Kansas Medical Center. Dr. Curran has been named director of the section of preventive medicine and public health of the department of internal medicine. He was awarded his bachelor of arts degree from Harvard University in 1941 and his doctor of medicine degree from Columbia University in 1944. He interned and took his residency at the Presbyterian Hospital of the College of Physicians and Surgeons of Columbia University. Dr. Curran continued his postgraduate training as a national research council fellow at Columbia University from 1948 to 1950 in the department of biochemistry and then joined the medical faculty as an assistant in medicine. He was an established investigator of the American Heart Association from 1953 to 1958. Dr. Curran had been with the University of Kansas Medical faculty since 1954. His field of medical research is concerned with the metabolism of fat and cholesterol.

Other new medical faculty appointments announced in September included: Dr. Clark Bublitz to senior instructor in pharmacology. Dr. Bublitz formerly was a fellow in physiologic chemistry at Johns Hopkins School of Medicine. He was awarded his Ph.B. degree from the University of Chicago in 1949 and his Ph.D. degree from the same institution in 1925. From 1952 to 1953 Dr. Bublitz served as an assistant in biochemistry at the University of Chicago. He was a fellow of the Nutrition Foundation under the supervision of Dr. E. P. Kennedy from 1954 to 1955. The following year he was a postdoctoral fellow of the American Cancer Society under the supervision of Dr. F. Lynen. He was a fellow in physiologic chemistry at Johns Hopkins School of Medicine from 1957 to 1959.

Dr. George W. Duane has been appointed an instructor in internal medicine. Last year Dr. Duane was a St. Louis Heart Association fellow at Firmin Desloge Hospital. He was awarded his doctor of medicine degree from St. Louis University in 1952. Dr. Duane interned at Providence Hospital in Seattle and took his residency at San Joaquin General Hospital from 1955 to 1958.

Dr. Thomas T. Flynn, newly appointed instructor in neurology and psychiatry, was awarded his bachelor of science degree from St. Thomas College in St. Paul, Minn., in 1950. He received his M.D. degree from Saint Louis University in 1954. Dr. Flynn interned at St. Louis City Hospital and then took a three year residency at Washington University. He then studied at Yale University, where he was awarded his masters degree in Public Health in 1958. He has been affiliated with St. Louis County Hospital as staff psychiatrist and as clinical director of Glenwood Clinic.

Dr. Harold Segal, assistant professor of pharmacology, came to the University from the University of Pittsburgh School of Medicine where he was assistant professor of pharmacology. Dr. Segal was awarded his bachelor of science degree from Carnegie Institute of Technology in 1947 and his master of science degree from the University of Minnesota in 1952. Dr. Segal served as a parttime instructor from 1950 to 1955. He was a research associate in the department of zoology at UCLA from 1952 to 1954 and also served part time as an instructor in the biochemistry department at the University of Minnesota from 1950 to 1955.

Dr. Benjamin F. Smith has been appointed instructor in gynecology and obstetrics and will participate in the teaching program of the University's

(Continued on page 1166)

and
lood pressure
is controlled
safely and
effectively

The hypertensive under treatment is frequently burdened with side effects of therapy including states of depression, fatigue, and lethargy. He finds little joy left in his life and laughter is almost a forgotten experience.

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Dosage: One tablet 3 or 4 times daily, ideally after meals, at intervals of not less than 4 hours.

1. Moyer, J. H.; Dennis, E., and Ford, R.: Arch. Int. Med. *96*:530, 1955.
2. Terman, L. A.: Illinois M. J. *3*:67, 1957.
3. La Barbera, J. F.: M. Rec. & Ann. *50*:242, 1956.
4. Bendig, A.: New York J. Med. *66*:2523, 1956.

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From the Medical Schools

(*Continued from page 1158*)

department of gynecology and obstetrics. Dr. Smith is in private practice and has been a member of the courtesy staff of St. Mary's Hospital since 1951. He was awarded his M.D. degree from Washington University in 1945 and interned at Deaconess Hospital. He took his residency in obstetrics and gynecology at St. Louis County Hospital.

Dr. Morton M. Weber has been appointed assistant professor of microbiology. He came to Saint Louis University from Harvard Medical School where he was an instructor in bacteriology and immunology. Dr. Weber was awarded his bachelor of science degree from the College of the City of New York and his doctor of science degree from the Johns Hopkins University School of Hygiene and Public Health. He held a two year fellowship at McCollum-Pratt Institute which was awarded by the National Foundation.

Travel

Dr. Don C. Weir, associate professor of clinical radiology, was guest speaker at the Montana State General Practitioners Society annual meeting held in Glacier Hotel, Glacier National Park, Montana. He lectured on "Pitfalls in Roentgen Diagnosis" and "Roentgen Evaluation of the Acute Abdomen." He also delivered a paper on "Roentgen Aspects of Diagnosis of Injury to the Cervical Spine" before a meeting of the Montana State Radiological Society.

Dr. Otakar Machek, instructor in orthopedic surgery, presented a paper at the 37th Annual Session of the American Congress of Physical Medicine and Rehabilitation, at Minneapolis, Minn. The paper was entitled "Vocational Evaluation in the Cerebral Palsied."

Three members of the Pharmacology Department attended the fall meeting of the Society for Pharmacology and Experimental Therapeutics held in Coral Gables, Fla., August 31 to September 3. In attendance were Dr. Elizah Adams, professor of pharmacology and director of the department; Dr. Irving A. Coret, assistant professor of pharmacology, and Dr. Ernest C. Griesemer, instructor in pharmacology.

Dr. John W. Dwyer, director of the department of biology and research associate at Missouri Botanical Gardens, joined two Yale scientists in a Panama jungle expedition during the summer months to collect botanical specimens. Dr. Dwyer and his colleagues collected plants of medicinal and economic importance for distribution to scientific institutions. Accompanying Dr. Dwyer on the expedition to the Darien Province was Dr. Kenton Chambers and Dr. William Stern, of Yale University.

BOOKS RECEIVED

ELECTROCARDIOGRAPHY, by Michael Bernreiter, M.D., Assistant Clinical Professor of Medicine, University of Kansas Medical School; Chief of Electrocardiography, St. Mary's Hospital, Kansas City, Missouri. J. B. Lippincott Company, Philadelphia, Montreal.

CIBA FOUNDATION SYMPOSIUM ON THE CEREBROSPINAL FLUID, PRODUCTION, CIRCULATION AND ABSORPTION. Editors for the Ciba Foundation: G. E. W. Wolstenholme, O.B.E., M.A., M.B., B.Ch., and Cecilia M. O'Connor, B.Sc. With 141 illustrations. Little, Brown and Company, Boston. Price $9.00.

CIBA FOUNDATION SYMPOSIUM ON THE CHEMISTRY AND BIOLOGY OF MUCOPOLYSACCHARIDES. Editors for the Cuba Foundation: G. E. W. Wolstenholme, O.B.E., M.A., M.B., B.Ch., and Maeve O'Connor, B.A. With 48 illustrations. Little, Brown and Company, Boston. Price $8.50.

CIBA FOUNDATION COLLOQUIA OF ENDOCRINOLOGY. Volume 12. Hormone Production in Endocrine Tumours. Editors for the Ciba Foundation: G. E. W. Wolstenholme, O.B.E., M.A., M.B., B.Ch., and Maeve O'Connor, B.A. With 58 illustrations and Cumulative Index to Volumes 1-12. Little, Brown and Company, Boston. Price $9.00.

TECHNIC AND PRACTICE OF PSYCHOANALYSIS, by Leon J. Saul, M.D., Professor of Clinical Psychiatry, Medical School of the University of Pennsylvania; Training Analyst, Philadelphia Psychoanalytic Institute; Psychiatric Consultant, Swarthmore College. J. B. Lippincott Company, Philadelphia, Montreal. Price $8.00.

THE CARE OF THE GERIATRIC PATIENT, edited by E. V. Cowdry, Ph.D., Sc.D. (Hon.) Director of Wernse Cancer Research Laboratory, Washington University School of Medicine; Chairman of the Medical and Scientific Committee, American Society for the Aged. The C. V. Mosby Company, St. Louis. 1958. Price $8.00.

POISONING, A GUIDE TO CLINICAL DIAGNOSIS AND TREATMENT, by W. F. von Oettingen, M.D., National Institutes of Health, U. S. Public Health Service, U. S. Department of Health, Education and Welfare. Second Edition. W. B. Saunders Company, Philadelphia, London, 1958. Price $12.50.

■ Exhibits unusual analgesic properties, different from those of any other drug ■ Specific and superior in relief of SOMAtic pain ■ Modifies central perception of pain without abolishing natural defense reflexes ■ Relaxes abnormal tension of skeletal muscle

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DEATHS

Bickford, Wallace M., M.D., Miami, Florida, a graduate of Tufts College Medical School, 1905; member of Saline County Medical Society; aged 79; died June 14.

Jennings, Perry W., M.D., Canton, a graduate of Washington University Medical School, 1908; member of Lewis-Clark-Scotland County Medical Society; aged 75; died July 7.

Shumate, David L., M.D., Kansas City, a graduate of Barnes Medical College, 1895; member of Jackson County Medical Society; aged 85; died July 8.

Thiessen, Edward H., M.D., Mission Hills, Kansas, a graduate of the University of Kansas, a graduate of the University of Kansas Medical School, 1921; member of Jackson County Medical Society; aged 64; died July 15.

Moeller, Carl E., M.D., St. Louis, a graduate of Washington University Medical School, 1903; member of St. Louis Medical Socicty; aged 80; died July 16.

Epps, Curtis H., M.D., Springfield, a graduate of Washington University School of Medicine, 1936; member of Greene County Medical Society; aged 48; died July 17.

Herbst, Frank, M.D., Kansas City, a graduate of Harvard Medical School, 1901; member of Jackson County Medical Society; aged 82; died July 26.

Shelby, Mitchell H., M.D., Cape Girardeau, a graduate of Vanderbilt University School of Medicine, 1914; member of Cape Girardeau County Medical Society; aged 78; died July 29.

Niedermeyer, Frederick P., M.D., Kansas City, a graduate of Northwestern University Medical School, 1948; member of Jackson County Medical Society; aged 36; died August 12.

Breuer, Robert E., M.D., Newburg, a graduate of St. Louis University Medical School, 1907; member of Mid-Mo. Counties Medical Society; aged 77; died August 19.

Mazur, Herbert A., M.D., University City, a graduate of Washington University School of Medicine, 1943; member of St. Louis County Medical Society; aged 40; died August 23.

NEW MEMBERS

Avery, Willard B., M.D., 329 Main St., Boonville. Cooper County Medical Society.

Bare, Chester I., Jr., M.D., 9406 E. 63rd St., Raytown. Jackson County Medical Society.

Bradford, John F., M.D., Professional Bldg., Kansas City. Jackson County Medical Society.

Ellis, Elmer F. M.D., General Hospital No. 2, Kansas City. Jackson County Medical Society.

Garrison, T. W., M.D., Camdenton. Mid-Mo. Counties Medical Society.

Gregory, Ralph W., M.D., 231 Plaza Time Bldg., Kansas City. Jackson County Medical Society.

Holley, Donald B., M.D., Camdenton. Mid-Mo. Counties Medical Society.

Leonhardt, Erwin L., M.D., State Hospital, Fulton. Callaway County Medical Society.

McIntyre, John D., M.D., 4620 Nichols Parkway, Kansas City. Jackson County Medical Society.

Mantz, Frank A., Jr., M.D., St. Joseph's Hospital, Kansas City. Jackson County Medical Society.

Penner, Stanley, M.D., Mercy Hospital, Kansas City. Jackson County Medical Society.

Steele, James C., Jr., 4635 Wyandotte St., Kansas City. Jackson County Medical Society.

Missouri Medicine in Review

Leo H. Pollock, M.D.

FORTY YEARS AGO

The Kansas City Board of Health has established a system of licensing reputable physicians to treat narcotic addicts and is placing restrictions on all physicians in prescribing and administering narcotics. All addicts are required to register with the board and will be assigned for treatment to the physicians especially licensed to do this work.

Leo H. Pollock, M.D.

Sixty doctors from Marion, Lewis and Pike counties in Missouri and Adams and Pike counties in Illinois met at the Ani-E-Carte Club House near Hannibal and organized a Five County Society on August 28, 1919. Dr. E. H. Bounds, Hannibal, was elected president, and Dr. W. E. Shastid, Pittsfield, Illinois, was elected secretary.

From the *Journal of the American Medical Association* it is learned that the Distinguished Service Cross has been awarded by the commanding general of the American Expeditionary Force to several physicians for extraordinary heroism in action in Europe. A Missouri member, Dr. Ernest W. Slusher, Kansas City, is included in the list.

The forty-fourth annual meeting of the Mississippi Valley Medical Association will be held in Louisville, Ky., October 21 to 23, with headquarters at the Sellbach Hotel. War conditions in 1918 caused the association to abandon its meeting in that year.

The Association of Military Surgeons of the United States will hold its 1919 meeting in St. Louis October 13 to 15.

(Continued on page 1173)

Missouri Medicine in Review

(Continued from page 1168)

TWENTY-FIVE YEARS AGO

The five units of the Homer G. Phillips Hospital, St. Louis, are scheduled to be completed by the fall of 1935. Labor disputes caused a two and a half months' delay in construction during the summer but work was resumed the middle of August. Construction was started in August 1932.

Dr. Harriet S. Cory, St. Louis, has been appointed executive secretary of the Missouri Social Hygiene Association. Dr. Cory has been serving in the capacity of acting executive secretary for some time.

Dr. F. M. Grogan, former superintendent of the St. Joseph and of the Nevada state hospitals, has been appointed to the superintendency of the St. Louis Training School. Dr. James Lewald, who was superintendent of the training school, resigned to accept a position in the District Training School, Laurel, Md.

The Rev. Father Alphonse M. Schwitalla, S.J., St. Louis, dean of the St. Louis University School of Medicine, left St. Louis September 14 to attend the organization meeting of a planning committee for the inspection and reappraisal of medical schools.

Official records show 1,097 cases of encephalitis with 221 deaths in the epidemic in St. Louis City and St. Louis County last year.

Dr. James A. Logan, Warsaw, secretary of the Benton County Medical Society, was unanimously selected as the Republican nominee for Congress from the 2nd Congressional District, and Dr. W. H. Breuer, St. James, Vice Chairman of the Council, was selected as nominee from the 8th district at a meeting of the district committee in Jefferson City, August 28. Dr. Logan is now mayor of Warsaw and has twice been a member of the State Legislature from Benton County. Dr. Breuer is a Past President of the Association and is Councilor of the 27th District.

TEN YEARS AGO

Three hundred and fifteen thousand was the compiled attendance at the 1949 Missouri State Fair, August 21 through 28. Of this number, a large portion viewed the Missouri State Medical Association's exhibit which was presented as a part of the lay education program of the Association's Committee on Health and Public Instruction.

The South Central Counties Medical Society met at Cabool on August 19. Speakers were Dr. William J. Stewart and John J. Modlin, Columbia.

Seventy-five physicians attended an evening dinner meeting of the Eighth Councilor District at Wilders Cafe, Joplin, on July 12. The Jasper County Medical Society was host at a most enjoyable social hour preceding the program. Wallis Smith, M.D., Springfield, President of the Association, gave the opening talk. Ray McIntyre, Field Secretary of the Association, spoke briefly on present efforts of the Administration in Washington to bring physicians under the Social Security Act via House Resolution 2893.

BOOKS RECEIVED

MEDICAL DEPARTMENT, UNITED STATES ARMY. Cold Injury, Ground Type. Prepared under the direction of Major General S. B. Hayes, The Surgeon General, United States Army; Editor in Chief, Colonel John Boyd Coates, Jr., MC; Associate Editor, Elizabeth M. McFetridge, M.A. Office of the Surgeon General, Department of the Army, Washington, D. C. 1958. Price $6.25.

DIABETES AS A WAY OF LIFE, by T. S. Danowski, M.D., Renziehausen Professor of Research Medicine, University of Pittsburgh School of Medicine; Senior Staff Physician at Presbyterian-Woman's, Children's, Elizabeth Steel Magee, and Shadyside Hospitals of Pittsburgh; Consultant in Metabolism, Oakland Veteran's Administration Hospital, Pittsburgh. Coward-McCann, Inc., New York. Price $3.50.

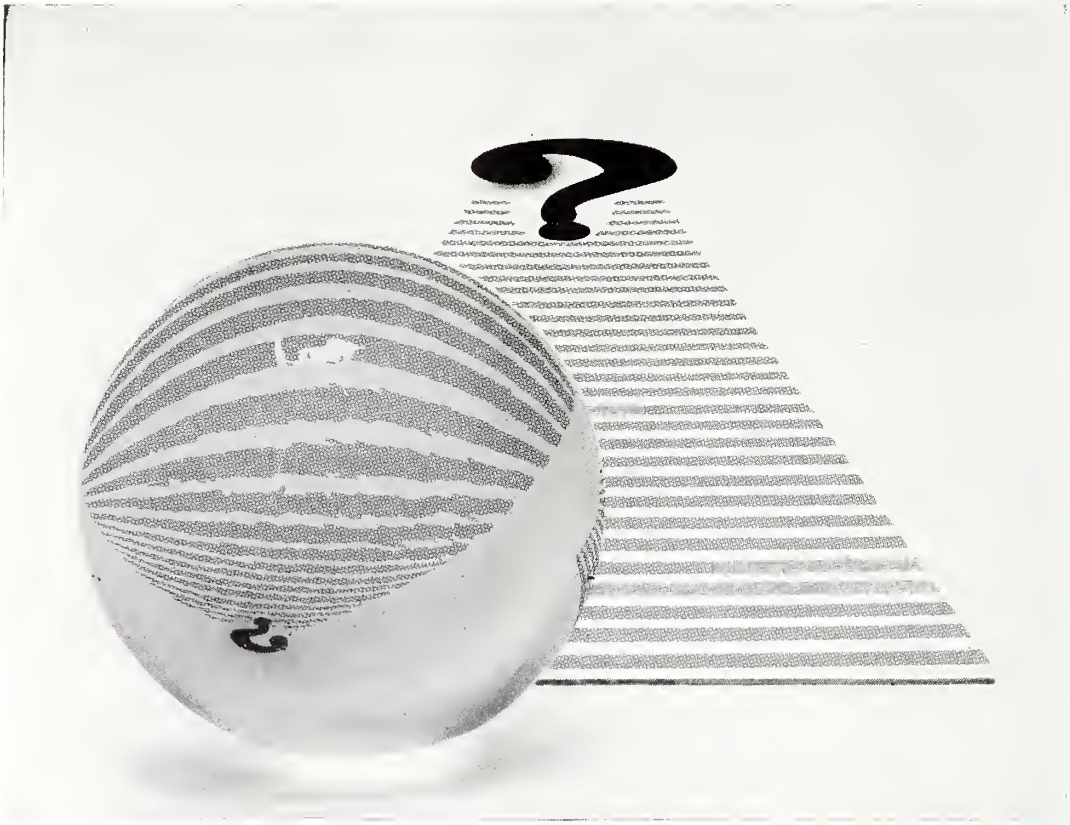
WHAT WE DO KNOW ABOUT HEART ATTACKS, by John W. Gofman, M.D., Professor, Medical Physics, University of California, Berkeley. G. P. Putnam's Sons, New York. Price $3.50.

A METHOD OF ANATOMY DESCRIPTIVE AND DEDUCTIVE, by J. C. Boileau Grant, M.D., Professor Emeritus of Anatomy in the University of Toronto and Curator of the Anatomy Museum. Sixth Edition. The Williams & Wilkins Company, Baltimore. 1958. Price $11.00.

NEGROES AND MEDICINE, by Dietrich C. Reitzes. Published for The Commonwealth Fund by Harvard University Press, Massachusetts. 1958. Price $7.00.

HOW TO LIVE WITH DIABETES, by Henry Dolger, M.D., Chief, Diabetes Clinic, Mt. Sinai Hospital, New York and Bernard Seeman. W. W. Norton & Company, Inc., New York. Price $3.50.

THE DOCTOR BUSINESS, by Richard Carter, Doubleday & Company, Inc., New York, 1958. Price $4.00.



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Mysteclin-V Suspension (per 5 cc.)	125	125,000
Mysteclin-V Pediatric Drops (per cc. — 20 drops)	100	100,000

References: 1. Dowling, H. F.: Postgrad. Med. 23:594 (June) 1958. 2. Gimble, A. I.; Shea, J. G., and Katz, S.: Antibiotics Annual 1955-1956, New York, Medical Encyclopedia Inc., 1956, p. 676. 3. Long, P. H., in Kneeland, Y., Jr., and Wortis, S. B.: Bull. New York Acad. Med. 33:552 (Aug.) 1957. 4. Rein, C. R.; Lewis, L. A., and Dick, L. A.: Antibiotic Med. & Clin. Ther. 4:771 (Dec.) 1957. 5. Stone, M. L., and Mersheimer, W. L.: Antibiotics Annual 1955-1956, New York, Medical Encyclopedia Inc., 1956, p. 662. 6. Campbell, E. A.; Prigot, A., and Dorsey, G. M.: Antibiotic Med. & Clin. Ther. 4:617 (Dec.) 1957. 7. Chamberlain, C.; Burros, H. M., and Borromeo, V.: Antibiotic Med. & Clin. Ther. 5:521 (Aug.) 1958. 8. From, P., and Alll, J. H.: Antibiotic Med. & Clin. Ther. 5:639 (Nov.) 1956.

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BOOKS RECEIVED

Skin Grafting, by James Barrett Brown, M.D., Professor of Clinical Surgery, Washington University School of Medicine; Chief Consultant in Plastic Surgery, Veterans Administration; Senior Civilian Consultant in Plastic Surgery to Surgeon General, U. S. Army; Senior Consultant in Plastic Surgery, E.T.O., U. S. Army, and Chief of Plastic Surgery at Valley Forge General Hospital, in World War II; and Frank McDowell, M.D., Associate Professor of Clinical Surgery, Washington University School of Medicine, St. Louis, Missouri. Third Edition. 328 Figures and 6 Color Plates. J. B. Lippincott Company, Philadelphia. 1958. Price $15.00.

Allergy in Pediatric Practice, by William B. Sherman, M.D., Associate Clinical Professor of Medicine, Columbia University College of Physicians and Surgeons; Associate Attending Physician, Presbyterian Hospital; Attending Physician, Roosevelt Hospital, New York, N. Y.; and Walter R. Kessler, M.D., Instructor in Pediatrics, Columbia University College of Physicians and Surgeons; Assistant Pediatrician, Babies Hospital; Assistant Attending Physician, Roosevelt Hospital, New York, N. Y. Illustrated. The C. V. Mosby Company, St. Louis. 1957. Price $9.25.

You Can Increase Your Heart-Power, by Peter J. Steincrohn, M.D. Doubleday & Company, Inc., New York. 1958. Price $4.95.

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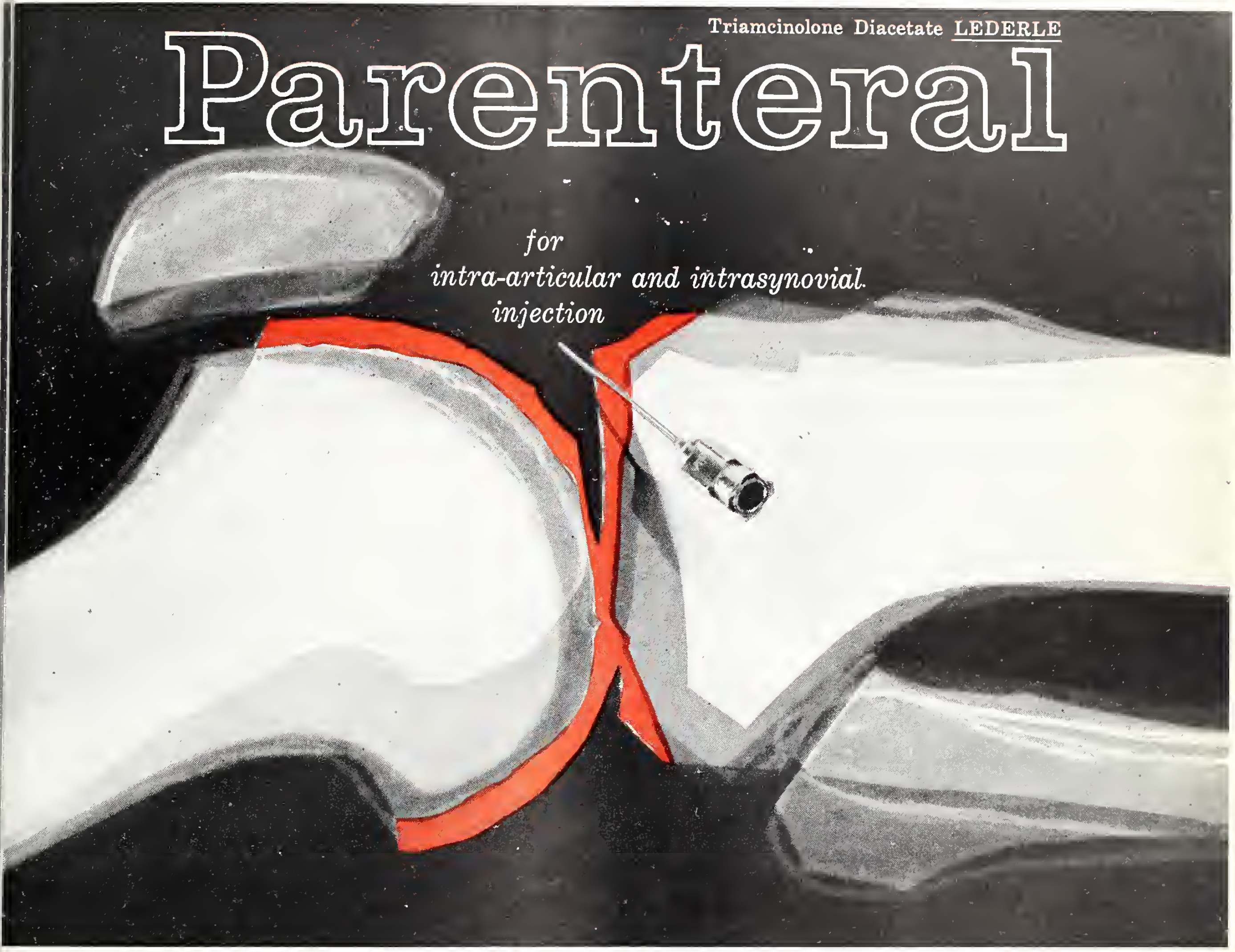

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BOOKS RECEIVED

Dietary Prevention and Treatment of Heart Disease. By John W. Gofman, Ph.D., M.D., Donner Laboratory, University of California, Berkeley; Alex V. Nichols, Ph.D., Donner Laboratory, University of California, Berkeley; and E. Virginia Dobbin, Senior Dietitian, E. V. Cowell Memorial Hospital, University of California, Berkeley. G. P. Putnam's Sons, New York. 1958. Price $3.95.

Ciba Foundation Symposium on the Neurological Basis of Behaviour. In commemoration of Sir Charles Sherrington, O.M., G.B.E., F.R.S., 1857-1952. Editors for the Ciba Foundation, G. E. W. Wolstenholme, O.B.E., M.A., M.B., B.Ch., and Cecilia M. O'Connor, B.Sc. With 109 illustrations. Little, Brown and Company, Boston. Price $9.00.

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Ciba Foundation Colloquia on Ageing. Volume 4, Water and Electrolyte Metabolism in Relation to Age and Sex. Editors for the Ciba Foundation; G. E. W. Wolstenholme, O.B.E., M.A., M.B., B.Ch., and Maeve O'Connor, B.A. With 85 illustrations. Little, Brown and Company, Boston. Price $8.50.

Men, Molds, and History, by Felix Marti-Ibanez, M.D., Professor and Director of the Department of the History of Medicine, New York Medical College, Flower and Fifth Avenue Hospitals, New York, N. Y., Editor in Chief of MD Medical Newsmagazine. MD Publications, Inc., New York. Price $3.00.

Breast Cancer. The Second Biennial Louisiana Cancer Conference, New Orleans, January 22-23, 1958. Edited by Albert Segaloff, M.D., Director of Endocrine Research, Alton Oscsner Medical Foundation; Associate Professor of Clinical Medicine, Tulane University School of Medicine. The C. V. Mosby Company, St. Louis. 1958. Price $5.00.

Schizophrenia, by Manfred Sakel, M.D. Philosophical Library, New York. Price $5.00.

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Curiosa et Trivia

William B. McCunniff

Autopsy records of the Philadelphia Zoological Gardens for the last forty years show up to twentyfold increase in arteriosclerosis among mammals and birds.

That note handed to a pharmacist for "sleepin in Allen park" was finally deciphered, with some Freudian-type logic. . . . Slippery elm bark would have filled the order! The still, small voice of conscience. . . .

January 29, 1896, twenty-three days after the announcement of the discovery of x-ray in the newspapers, E. H. Grubbe of Chicago began x-ray treatment of a patient with cancer of the breast. The next day he instituted treatment of a case of lupus vulgaris.

In the forty-nine years following 1333, the Black Death took the lives of 75,000,000 persons in Europe and Asia. By comparison, the influenza pandemic of 1918-19 carried off only 21,000,000 victims.

For all of the abundance of laws relating to prescriptions and medicines, the Federal Government has never specified how long a prescription marked "Refill P.R.N." should be valid after the writing physician is dead. Now, there is something you needn't fret about!

Capsule Clinics

- Seventeen patients with angina pectoris participated in an experimental evaluation of internal-mammary-artery ligation. Ligation was performed in eight patients; nine had skin incisions only. During the first six months following surgery, five of eight ligated patients and five of nine nonligated subjects reported significant subjective improvement. The subjective benefit from the operation is probably psychological. Cobb, L. A., et al., New England J. M. **260:**1115, 1959.
- Early individual lesions in a selected segment of the retina of 25 diabetic patients were observed for 12 months. Twelve patients were given 150 mdgm. vitamin B_{12} daily throughout the test period. Three assessments: "density," "change" and "activity" were then calculated for treated subjects and controls. There was no evidence that vitamin B_{12} influenced the course of diabetic retinopathy. Kenn, H. and Smith, R., Lancet **1:**849, 1959.

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WASHINGTON

At the Close of Congress

FORAND BILL

The House Ways and Means Committee held hearings on the Forand bill but deferred showdown voting on it until next year. The legislation —which is vigorously opposed by the medical profession, other groups on the health team and the Eisenhower Administration—would provide hospital, surgical and nursing home care for federal Social Security beneficiaries. Social Security taxes would be raised to help finance the expensive program.

KEOGH-SIMPSON BILL

The Keogh-Simpson bill, after being approved by the House, was left hanging in the Senate Finance Committee. The Senate committee held two sets of hearings. It could vote early next year on the legislation which would grant income tax deferrals to physicians and other self-employed persons as an incentive to invest in private pension plans.

INTERNATIONAL MEDICAL RESEARCH

Chairman Oren Harris (D., Ark.) postponed until next session a vote by the House Commerce Committee on the Senate-approved international medical research bill because of a backlog of more urgent measures requiring committee action this year. He said that "a diligent effort" would be made during the recess to clarify a number of points at issue revealed in testimony before his committee. The bill calls for an annual $50 million authorization to finance a new national institute of health to foster international medical research programs and cooperation. The Administration opposes some of its provisions.

MEDICAL RESEARCH

President Eisenhower and Arthur S. Flemming, Secretary of Health, Education and Welfare, made clear that they did not feel bound to spend the additional $106 million which Congress voted for medical research. Congress raised the $249 million requested by the President to $400 million. Mr. Eisenhower expressed concern that Congress is going too fast in providing medical research funds which are administered by the National Institutes of Health. He warned of a danger that the quality of research projects might be lowered and that manpower and other resources might be diverted from "equally vital teaching and medical practice." He directed that every project approved must be "of such great promise that its deferment would be likely to delay progress in medical discovery."

Secretary Flemming said that the President's criteria would be followed conscientiously. But the Secretary gave assurance that the restrictions would not be so rigid as to hamper research by denying funds for worthwhile projects.

HOUSING

One of the most important and surprising developments during this session of Congress was the political power shown by Mr. Eisenhower, a lame-duck Republican president, in generally calling the shots on legislation although Democrats controlled the House and Senate with substantial majorities. In his fight against "big spending" measures, the President effectively used his veto power to get the bills more to his liking. The Democrats were unable to muster the votes to override vetoes of two housing bills but the third one was not vetoed. The third compromise housing bill provides Federal Housing Administration loan guarantees for building proprietary nursing homes. A second provision provides FHA loan guarantees and direct loans for housing for elderly persons, and a third provision authorizes loans for construction of housing for interns and nurses.

LIVE POLIO VIRUS VACCINE

Live polio virus vaccine may be licensed for public use within a year or two. The Surgeon General of the Public Health Service, Dr. Leroy E. Burney, said: "If energetic efforts are continued to find answers to the remaining technical questions concerning safety, effectiveness and manufacturing procedures, one or more of the three vaccines now being proposed may be under production within one to two years."

RADIATION HEALTH SAFETY

Primary responsibility for radiation health safety has been transferred from the Atomic Energy Commission to the Department of Health, Education and Welfare. This shift in responsibility was called for in legislation pending in Congress but President Eisenhower ordered the transfer without Congressional action.

The President directed HEW to "intensify its radiological health efforts and have primary responsibility . . . for the collation, analysis and interpretation of data on environmental radiation levels such as natural background, radiography, medical and industrial uses of isotopes and x-rays and fallout." HEW Secretary Flemming also was named chairman of a cabinet-level Federal Radiation Council.

Organization

AMERICAN MEDICAL ASSOCIATION

President, Louis M. Orr, M.D., Orlando, Fla.
President-Elect, E. Vincent Askey, M.D., Los Angeles, Calif.
Clinical Session, Dallas, Texas, December 1-4, 1959.
Annual Meeting, Miami Beach, Florida, June 13-17, 1960.

MISSOURI STATE MEDICAL ASSOCIATION

102nd Annual Session, St. Louis

March 13-16, 1960

President, Ralph Perry, Kansas City.
President-Elect, R. O. Muether, St. Louis.
Vice Presidents, James R. Meador, Clayton; G. D. Shull, Jefferson City; J. J. Wimp, Kirksville.
Treasurer-Editor, Charles R. Doyle, St. Louis.
Secretary, J. I. Matthews, Jefferson City.
Speaker of the House of Delegates, O. P. Hampton, University City; Vice Speaker, William C. Mixson, Kansas City.
Field Secretary, Ray McIntyre, St. Louis.
Assistant Editor, Helen Penn, St. Louis.
Executive Secretary, Tom R. O'Brien, 623 Missouri Theatre Bldg., 634 N. Grand Blvd., St. Louis 3.

Delegates to the American Medical Association

Joseph C. Peden, Sr., St. Louis; alternate, Dean Sauer, St. Louis, 1958-1959. F. L. Freierabend, Kansas City; alternate, Rolla B. Wray, Nevada, 1958-1959. Durward G. Hall, Springfield; alternate, Guy N. Magness, University City, 1959-1960. H. E. Petersen, St. Joseph; alternate, J. Loren Washburn, Versailles, 1959-1960. A. W. Neilson, St. Louis; alternate, Dean Sauer, St. Louis, 1960-1961. Richard H. Kiene, Kansas City; alternate, Rolla B. Wray, Nevada, 1960-1961.

Standing Committees

Scientific and Postgraduate Work—John I. Matthews, Jefferson City, Chairman (1960); M. Pinson Neal, Columbia (1962); John A. Growdon, Kansas City (1961); James G. Janney, St. Louis (1961); Hector W. Benoit, Kansas City (1960). **Associate Members**—W. P. Maddux, Springfield; J. H. Keim, Cape Girardeau; Wilbur A. Mullarky, St. Louis; Wyeth Hamlin, Hannibal; Kenneth K. Keown, Columbia; Robert W. Smith, Marceline.

Defense—C. E. Hyndman, St. Louis, Chairman (1960); Roland S. Kieffer, St. Louis (1962); W. W. Gist, Kansas City (1962); L. P. Forgrave, St. Joseph (1961); Ronald F. Elkins, Springfield (1961).

Public Policy and Public Relations—R. O. Muether, St. Louis, Chairman; C. C. Cohrs, Moberly; R. J. Crider, St. Charles; Rolla B. Wray, Nevada; James E. McConchie, Independence; C. B. Schoeberl, Joplin; H. W. Carrington, Lebanon; John R. Dixon, Brookfield; R. R. Lyle, Versailles.

Medical Education and Hospitals—Kenneth Glover, Mount Vernon, Chairman (1962); William A. Knight, Jr., St. Louis (1962); George J. L. Wulff, University City (1961); Doyle C. McCraw, Bolivar (1961); Ralph R. Coffey, Kansas City (1960).

Cancer—Marvin L. Napper, Springfield, Chairman (1961); John J. Modlin, Columbia (1961); George A. Carroll, St. Louis (1962); E. Kip Robinson, Kansas City (1962); Joseph L. Fisher, St. Joseph (1960). **Associate Members**—John E. Lamy, Sedalia; Byron E. Watts, Jefferson City; Charles E. Lockhart, Springfield; Milton Shoss, Cape Girardeau; Henry C. Allen, St. Louis; James R. McVay, Jr., Kansas City.

Medical Economics—A. P. Rowlette, Moberly, Chairman (1961); George L. Hawkins, St. Louis (1962); John R. Forgrave, St. Joseph (1961); A. B. Smith, Kansas City (1960). **Associate Members**—R. D. Duncan, Springfield; G. W. Winn, Boonville; E. D. Imes, Maryville; John T. Crowe, Cape Girardeau; Robert E. Kirshman, Joplin.

Mental Health—John J. O'Hearne, Kansas City, Chairman; Robert J. Mueller, St. Louis; H. V. Guhleman, Jefferson City; James N. Haddock, Webster Groves; D. R. Edwards, Sedalia; A. L. Brown, Springfield; Arnold S. Block, St. Louis; Albert Preston, Kansas City; N. Venay Bolin, Kansas City.

Maternal Welfare—James E. Keeler, Kansas City, Chairman (1961); William B. See, Columbia (1962); E. E. Wadlow, St. Joseph (1962); Joseph M. Krebs, St. Louis (1961); Joseph L. Johnston, Springfield (1960). **Associate Members**—P. V. Siegel, Smithton; H. C. Willumson, St. Joseph; A. C. Trueblood, St. Louis; Irwin T. Craig, Joplin; J. J. Wimp, Kirksville; Forrest C. Long, Savannah; E. G. Hamilton, St. Louis; A. B. Sinclair, Kansas City.

Infant and Child Care—E. J. Schwartz, Springfield, Chairman; Daniel B. Landau, Hannibal; H. E. Petersen, St. Joseph; R. J. LaDriere, St Louis; Guy N. Magness, University City; L. L. Davis, Mexico; James J. Pascoe, Nevada; Jack N. Wiles, West Plains; James A. Kinder, Cape Girardeau; Sanford F. Cockerell, Independence.

Health and Public Instruction—John R. McDaniel, St. Joseph, Chairman (1960); Roy A. Walther, Overland (1962); F. H. Hartwig, Kansas City (1962); J. Earl Smith, St. Louis (1961); E. A. Belden, Jefferson City (1960). **Associate Members**—William T. McNew, Carthage; Chester R. Peck, Kennett.

Constitution and By-Laws—W. A. Bloom, Fayette, Chairman (1960); H. M. Parker, Kansas City (1962); Charles E Martin, St. Louis (1962); W. L. Allee, Eldon (1961); P. W Jennings, Canton (1961).

Fractures—Robert E. Funsch, University City, Chairman (1961); Paul W. Meyer, Kansas City (1962); Lee T. Ford, St. Louis (1962); O. P. Hampton, University City (1960); Thomas G. Otto, Cape Girardeau (1960). **Associate Members**—William C. Francis, Springfield; B. L. Murphy, Hannibal; Otis E. James, Kansas City; William C. Critchlow, Sikeston.

Eye Health—John McLeod, Kansas City, Chairman (1962); H. B. Stauffer, Jefferson City (1962); T. E. Sanders, St. Louis (1961); H. B. Ivy, Springfield (1961); Paul G. Wolff, Cape Girardeau (1960). **Associate Members**—Dick H. Underwood, Kansas City; Paul B. Webb, St. Louis; Michael F. Pernoud, St. Louis; D. E. Eggleston, Macon; W. L. Post, Joplin; Robert S. Minton, St. Joseph; William B. Wilcoxen, Bowling Green.

Laboratory Medicine—Hollis N. Allen, St. Louis, Chairman (1962); Joseph E. Flynn, Columbia (1962); Victor B. Buhler, Kansas City (1960); Angelo Lapi, Kansas City (1961); Fred C. Coller, Springfield (1960).

Industrial Health—H. M. Roebber, Bonne Terre, Chairman (1960); S. W. Scorse, Joplin (1962); Vencel W. Hollo, St. Louis (1961); William H. Duncan, Kansas City (1961); Douglas A. Ries, Richmond Heights (1960). **Associate Members**—James W. Clawson, Springfield; C. Rush McAdam, St. Louis.

Diabetes—H. E. Oppenheimer, Clayton, Chairman (1960); Lucien W. Ide, St. Joseph (1962); J. Bruce Lemmon, Springfield (1961); H. M. Gilkey, Kansas City (1961); Charles M. Lamke, Columbia (1960). **Associate Members**—William H. Olmsted, St. Louis; Robert E. Koch, Clayton; Ralph W. Casford, Kansas City; J. H. Walterscheid, Hannibal.

Anesthesiology—Russell D. Shelden, Kansas City, Chairman (1961); E. O. Kraft, St. Louis (1962); O. T. Blanke, Joplin (1961); W. W. Tillman, Springfield (1960); Carl K. Ness, St. Joseph (1960).

Hospital and Professional Relations—Hollis N. Allen, St. Louis, Chairman (1961); Victor B. Buhler, Kansas City (1962); W. S. Sewell, Springfield (1961); Stanley S. Peterson, Springfield (1960); Carl F. Vohs, St. Louis (1960). **Associate Members**—W. F. Francka, Hannibal; Ralph Perry, Kansas City.

Control of Venereal Disease—Edwin M. Powell, Springfield, Chairman (1962); T. E. McMillan, Kansas City (1962); E. M. Cannon, St. Louis (1961); A. W. Neilson, St. Louis (1961); Robert B. Bristow, St. Joseph (1960). **Associate Member**—John E. Byrne, St. Louis

Physical Medicine and Rehabilitation—D. Elliott O'Reilly, St. Louis, Chairman (1961); F. D. Sundstrom, Springfield (1962); William J. Stewart, Columbia (1962); F. O. Tietjen, Jefferson City (1961); John W. Cashman, Kansas City (1960). **Associate Member**—Otakar Machek, St. Louis.

Civil Defense—Carl D. Siegel, Sedalia, Chairman; M. P. Leech, Fayette; H. D. Steinbeck, Union; Carroll P. Hungate, Kansas City; A. S. Bristow, Princeton; John R. Forgrave, St. Joseph; J. M. Canella, Hannibal; Curtis H. Lohr, Clayton; R. Ned White, Springfield; George E. Thoma, St. Louis; George L. Watkins, Farmington; John A. Griffith, Kansas City.

Aging—Stanley S. Peterson, Springfield, Chairman; Ralph Perry, Kansas City; Rolla B. Wray, Nevada; Louis H. Kohler, St. Louis; C. Thorpe Ray, Columbia.

Special Committees

Tuberculosis—F. E. MacInnis, Kansas City, Chairman; Paul Murphy, St. Louis; H. M. Roberts, Kansas City; Joseph L. Lucido, St. Louis; Walter C. Gray, St. Louis; David N. Kerr, St. Louis; Glenn O. Turner, Springfield; Carl G. Popp, Sikeston (1960).

Study of Cardiac Disease—Earl L. Loyd, Jefferson City, Chairman; E. Lee. Shrader, St. Louis; William I. Park, Springfield; E. J. McIntire, Carthage; A. M. Estes, Cape Girardeau; Stanley F. Morest, Kansas City; William J. Gillespie, St. Louis; Carl A. Potter, St. Joseph; E. E. Glenn, Springfield; F. J. Biggs, Poplar Bluff (1960).

Rural Medical Service—A. E. Spelman, Smithville, Chairman; William J. Shaw, Fayette; B. J. Bass, Salem; John F. Pearl, St. Clair; Charles H. Lewellen, Louisiana; C. A. McBurney, Slater; Jack Mullen, Bonne Terre; A. J. C. McCallum, Aurora (1960).

American Medical Education Foundation—James P. Murphy, St. Louis, Chairman; Hugh E. Stephenson, Columbia; Donald F. Gose, Springfield; Russell D. Shelden, Kansas City; Allen I. Herman, St. Joseph (1960).

Across Missouri

The Metropolitan District Plan, to be voted on by St. Louis City and St. Louis County on November 3, includes the combining of police facilities and the establishing of a training center for police of both the city and the county. A training center for policemen has been a part of the curriculum at the University of Kansas City for the last year. A 15 hour lecture course in principles of organization and management has been passed by 153 men, with 57 failing to pass. In these courses special attention was given to the sociological and economic factors of crime. Case studies in juvenile delinquency, alcoholism, drug addiction were covered. Courses in introduction to criminology and introduction to law have been completed by 67 men. Bernard C. Brannon, chief of police in Kansas City, is quoted as envisioning the day when all Kansas City policemen will be required to have at least two years of college work and all officers above the rank of sergeant a degree in criminology.

Deaths from cancer in the State of Missouri declined by 152 in 1958; however it still remained the highest rate of any year except 1957 when the record number 7,223 deaths occurred. Lung cancer was the greatest cause of death among men and women combined and was the leading cause of death among men. Of 895 deaths from lung cancer, 741 were men. Five hundred and eighty-one women died of breast cancer in the state. Eighty-seven children under 15 years of age died in 1958, a decrease of 23 from the previous year. Forty of these cases were leukemia.

An analysis of the report of the Division of Health made by the Missouri Division of the American Cancer Society, showed that 3,666 males and 3,405 females died of cancer. It showed that 1,066 deaths occurred in the age bracket of 65 to 69 and 877 in the 60 to 64 age group. The figures showed that deaths by cancer were caused in 53 different body sites but that 85 per cent of the deaths were from cancer in only 16 sites.

Costs of the three major welfare programs in Missouri rose in the month of August, according to the Division of Welfare. The cost of dependent children grants rose $7,510; aid to the permanently and totally disabled rose $48,206, and old age assistance increased $340,177. The total costs were aid to dependent children, $2,344,389; aid to the disabled $945,489 and old age assistance $6,984,177. Aid to dependent children and to the disabled have been increasing gradually but August, with the increase of $2.96 in the average monthly check, rose for the first time in some months.

"Revenue, highways and traffic safety are problems that may snowball so rapidly that Gov. James T. Blair will have little choice but to call a special session of the Missouri legislature," says an editorial in the *Kansas City Times*. The editorial explains: "At the moment the use tax remains an unknown quantity. Nobody knows how much additional revenue it will bring to the state. The first full quarter returns won't be in until January 15. The report could be disappointing. The sales tax yield may not come up to expectations. And the State of Missouri is running so close to its budget that there is little room for miscalculation."

It is pointed out that since the legislature adjourned at the end of May, 320 persons have been killed on the streets and highways and that the total at the middle of September was 630 for the year, one more than at the same time in 1958. The recent session of the legislature approved few of the traffic safety bills that might have had an effect on traffic fatalities. Among the bills were the point system for the revocation of licenses and amendments that would have permitted more effective action against drunken drivers. Also the highway patrol is considerably undermanned. The proposed gasoline tax increase was turned down and Missouri still has the lowest gasoline tax in the United States. With the federal road plan passed, although in a reduced form, it becomes more to be wished that Missouri could take its part in building more four lane highways and modernizing some others.

The editorial suggests that since the next session of the Missouri legislature is not scheduled until 1961 that "as of now, the governor apparently believes that Missouri might not be able to wait that long."

It is reported that many schools "broke the law" on September 28. There are statutes in Missouri requesting the observance of Arbor Day, Bird Day and Missouri Writers Day, but the statutes read: "September 28 is Frances E. Willard Day and in every public school in the state of Missouri one quarter of the school day on said date shall be set apart for instruction relative to the history and benefit of the prohibition of the manufacture and sale of intoxicating liquors." A sampling of schools in at least one metropolitan area showed that the school day went as usual.

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Eleventh Scientific Assembly Meets November 7, 8

Saturday, November 7, 10:15 a.m.

SYMPOSIUM ON FRACTURES

Emergency Treatment of Fractures, Earl D. McBride, M.D., Oklahoma City, Clinical Professor of Orthopedic Surgery, Oklahoma University School of Medicine.

The Care of Open Fractures, Richard E. Lord, M.D., St. Louis, Clinical Instructor of Orthopedic Surgery, St. Louis University School of Medicine.

Management of Fractures of the Forearm, H. R. McCarroll, M.D., St. Louis, Associate Professor of Clinical Orthopedic Surgery, Washington University School of Medicine.

The Management of Trauma in Relation to Permanent Disability, Earl D. McBride, M.D., Oklahoma City.

Panel Discussion.

SYMPOSIUM ON HEMATOLOGY

Patho-Physiology and Treatment of the Megaloblastic Anemias, Richard H. Vilter, M.D., Cincinnati, Director, Department of Internal Medicine, University of Cincinnati College of Medicine.

Treatment of Chronic Lymphocytic Leukemia, Wayne R. Rundles, M.D., Durham, Professor of Medicine, Duke University School of Medicine, Chief of Hematology Laboratory.

Idiopathic Thrombocytopenic Purpura, Edward H. Reinhard, M.D., St. Louis, Professor of Medicine and Consultant in Oncology to the Department of Radiology, Washington University School of Medicine.

What Does a Low Hemaglobin Mean? R. O. Muether, M.D., St. Louis, Associate Professor of Internal Medicine, St. Louis University School of Medicine, and Director of Clinical Laboratories, St. Louis County Hospital.

Some Effects of Nutritional and Hematological Disorders on Cardiovascular Function, Richard W. Vilter, M.D., Cincinnati.

Diagnosis and Treatment of Multiple Myeloma, Wayne R. Rundles, M.D., Durham.

Panel Discussion.

Sunday, November 8, 9:00 a.m.

SYMPOSIUM ON MEDICINE

Coronary Heart Disease in Different Populations, Ancel Keys, Ph.D., St. Paul.

The Recognition of the Aerophagic Syndromes, James L. A. Roth, M.D., Philadelphia, Professor of Clinical Gastroenterology, Graduate School of Medicine, University of Pennsylvania.

The Management of Chronic Renal Disease, C. Thorpe Ray, M.D., Columbia, Professor and Chairman, Department of Medicine, University of Missouri School of Medicine.

Medical Education for General Practice, Vernon E. Wilson, M.D., Columbia, Dean, University of Missouri School of Medicine.

The Diet and Blood Lipids, Ancel Keys, Ph.D., St. Paul, Professor, University of Minnesota School of Public Health and Director, Laboratory of Physiological Hygiene.

Individualized Selection of Peptic Ulcer Operation, James L. A. Roth, M.D., Philadelphia.

Panel Discussion.

SYMPOSIUM ON OBSTETRICS

Fibrinogen-Fibrin Conversion Syndrome, C. Paul Hodgkinson, M.D., Detroit, Chief of the Department of Gynecology and Obstetrics, Henry Ford Hospital, and President-elect, American College of Obstetricians and Gynecologists.

Childbirth Without Fear of Interference, Clyde L. Randall, M.D., Buffalo, Professor, Obstetrics and Gynecology, University of Buffalo School of Medicine.

Management of Postpartum Bleeding, Carl Joseph Dreyer, M.D., St. Louis, Senior Instructor in Gynecology and Obstetrics, St. Louis University School of Medicine.

Hormone Treatment of Threatened Abortion, C. Paul Hodgkinson, M.D., Detroit.

Prolonged Labor, David G. Hall, M.D., Columbia, Assistant Professor, Department of Obstetrics and Gynecology, University of Missouri School of Medicine.

Placentas We Should Know—and Fear, Clyde L. Randall, M.D., Buffalo.

Panel Discussion.

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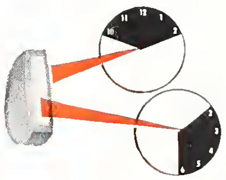

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References: 1. Lhotka, F. M.: Illinois M. J. 112: 259 (Dec.) 1957. 2. Fabricant, N. D.: E.E.N.T. Monthly 37:460 (July) 1958. 3. Farmer, D. F.: Clin. Med. 5:1183 (Sept.) 1958.

TRIAMINIC JUVELETS: Each timed-release Juvelet is equivalent in formula and dosage to one-half of a TRIAMINIC tablet, for the adult or child who requires only half strength dosage.

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The Woman's Auxiliary

MRS. STANLEY S. PETERSON

A new awareness of the problems in the fields of mental health and health care of the aged in Missouri was gained by our members attending the Fall Board Meeting in Springfield, September 23-24.

Mrs. Stanley S. Peterson

Dr. Addison M. Duval, Director of the Division of Mental Diseases in Missouri, outlined the tragic shortage of facilities for the care of the mentally ill in our state, and inspired his listeners to want to "go home and do something about it."

Pointing out that getting "our own house in order" in preparing for our own old age was as important as seeing that others in the community are taken care of in their old age, Dr. Stanley S. Peterson, of Springfield, went on to outline the "New Era of Aging," a six-point program endorsed by the A.M.A.

A summary of the actions of the A.M.A. at their Convention in Atlantic City, and their stand on current medical legislation; a summary of the recent convention of the World Medical Association, stressing its objects and policies; and an admonition to elect qualified people to represent us in our state legislatures and in Congress, were highlights of the talk by Dr. Durward G. Hall of Springfield, one of Missouri's delegates to A.M.A.

Safety—on the highway and in the home—was discussed by Mrs. J. D. Bennett of Kansas City, our state Safety Chairman, who most capably substituted at the last minute for our scheduled speaker, Mrs. Carrie Noelling, Vice-President of the Greater Kansas City Safety Council.

What could, and probably would, happen to each of us in case of an attack by an enemy power using nuclear weapons was graphically portrayed by Mrs. Jean Houston, formerly director of women's Civil Defense activities in Missouri, in her book report on *Alas, Babylon* by Pat Frank.

To close our opening session, a group of girls from Springfield Parkview High School Future Nurses Club, and their sponsor, Mrs. Belle Copsey, presented a panel discussion on the formation, sponsorship, and activities of Future Nurses Clubs, under the leadership of our Paramedical Careers Recruitment Chairman, Mrs. Robert Stewart of Sedalia.

That evening, following a social hour hosted by the Greene County Medical Society, and a banquet, we were entertained by the inimitable "Medical Hit Parade," presented by Greene County Doctors James T. Brown, Harold Lurie, F. T. H'Doubler, Jr., Don Gose, Fred Coller and Charles Lockhart, accompanied by Wilfred Adler.

Our second session on Thursday morning was devoted to reports of our officers and committee chairmen, a panel on membership by our vice presidents and directors, and reports of the county presidents. From these last reports we learned that doctors' wives all over Missouri have a busy year ahead, entertaining new members and guests, providing programs in every phase of the Auxiliary program for their own and lay groups, as well as a wide variety of benevolent projects in their own communities, in their auxiliaries and through other organizations.

"The Doctor's Wife—A Good Citizen," an address by Mr. D. E. Caywood of Springfield at our closing luncheon, gave us much to ponder on our way homeward, and will help us all in furthering our objective—"a group of women, friendly among ourselves, working for the betterment of the community health and safety."

An as-yet-unsolved problem which arose at our business meeting was the fact that we have had more applications for loans from our Medical Student Loan Fund than we can take care of. We are encouraged by the thought that so many worthy young men are interested in a medical career, and will give further consideration to how we can help as many as possible in the most advantageous way.

September has been a month of traveling for me. I have visited the Cape Girardeau, Jasper County, Greene County, and Grand River auxiliaries, attending luncheons, dinners and coffees, meeting members, reporting on the National Convention, and outlining and trying to give help and ideas to the local auxiliaries for the coming year. On the 26th I appeared before the Council of the Missouri State Medical Association to discuss some auxiliary problems.

The first week of October I will attend the Fall Conference of the National Auxiliary in Chicago, which is in effect a training session for state presidents and presidents-elect. From this meeting I will take information and help to local auxiliaries. In order to help me meet with as many members as possible with as little traveling as possible, the directors of Districts 1, 3, 4 and 6 have so far arranged meetings during the months of October and November in St. Joseph, St. Louis and Sedalia. I am looking forward to this opportunity to become better acquainted with our members and to share the inspiration I receive in Chicago.

Component Societies in Affiliation With the Missouri State Medical Association

County	District	President	Address	Secretary	Address
Andrew	1	V. R. Wilson	Rosendale	M. L. Holliday	Fillmore
Audrain	5	Harold D. Lankford	Mexico	Ernest S. Gantt	Mexico
Barton-Dade	8	Thomas W. Carroll	Lamar	Herbert M. Arnold	Lamar
Benton	6	T. S. Reser	Cole Camp	James A. Logan	Warsaw
Boone	5	Leroy Miller	Columbia	Joseph E. Flynn	Columbia
Buchanan	1	George W. Forman	St. Joseph	William B. Rost	St. Joseph
Butler-Ripley-Wayne	10	T. E. Ruff	Poplar Bluff	E. T. Hansbrough	Poplar Bluff
Callaway	5	A. K. Baur	Fulton	Vernon B. Jackson	Fulton
Camden	5				
Cape Girardeau	10	Paul Wolff	Cape Girardeau	G. M. Hoxworth	Cape Girardeau
Carter-Shannon	9	H. D. Rollins	Winona		
Chariton-Macon-Monroe-Randolph	2	C. C. Weger	Keytesville	Josephine Baker	Moberly
Clay	1	Reinhardt D. Dwyer	North Kansas City	James E. McCormick	Kansas City
Clinton	1	W. B. Spaulding	Plattsburg	J. P. Mabrey	Plattsburg
Cole	5	Joseph S. Summers, Jr.	Jefferson City	H. O. Loyd	Jefferson City
Cooper	5	Vernon D. Friedrichs	Pilot Grove	T. C. Beckett	Boonville
Dallas-Hickory-Polk	8	D. C. McCraw	Bolivar	C. H. Barnett	Bolivar
Dunklin	10	Leo J. Benson, Jr.	Kennett	E. L. Spence	Kennett
Franklin-Gasconade-Warren	4	Paul A. Brenner	Owensville	William Richardson	Union
Grand River Medical Society (Caldwell-Livingston-Carroll-Grundy-Daviess-Harrison-Linn-Mercer-DeKalb)	1	E. W. Allen	Carrollton	E. A. Duffy	Trenton
Greene	8	J. G. Siceluff	Springfield	G. Bruce Lemmon, Jr.	Springfield
Henry	6	Richard King	Clinton	R. S. Hollingsworth	Clinton
Howard	5	W. C. Allen	Glasgow	W. A. Bloom	Fayette
Jackson	7	Harold L. Gainey	Kansas City	Edward G. Kettner	Kansas City
Jasper	8	Irwin T. Craig	Joplin	David Allen	Joplin
Jefferson	4	Robert H. Donnell	Crystal City	John F. Rutledge	Crystal City
Johnson	6	Keith D. Jones	Warrensburg	T. Reed Maxson	Warrensburg
Lafayette-Ray	6	Walter E. Koppenbrink	Higginsville	Thomas B. Cook	Richmond
Lewis-Clark-Scotland	2	J. R. Bridges	Kahoka	P. W. Jennings	Canton
Lincoln-St. Charles	4	E. O. Damron	Elsberry	P. H. Rother	St. Charles
Marion-Ralls-Shelby	2	Julius Well	Palmyra	J. H. Walterscheid	Hannibal
Mid-Missouri County Medical Society (Phelps-Crawford-Dent-Pulaski-Maries-Laclede)	9	H. W. Carrington	Lebanon	M. K. Underwood	Rolla
Miller	5	W. L. Allee	Eldon	Carl T. Buehler	Eldon
Mineral Area County Medical Society (St. Francois-Iron-Madison-Washington-Reynolds-Ste. Genevieve	10	Marvin T. Haw	Bonne Terre	George L. Watkins, Jr.	Farmington
Moniteau	5	K. S. Latham	California	L. M. Gallagher	California
Montgomery	5	E. J. T. Andersen	Montgomery City	Samuel J. Byland	Wellsville
Morgan	5	Robert R. Lyle	Versailles	Ruth Kauffman	Versailles
Nodaway-Holt-Atchison-Gentry-Worth	1	Edward F. Bare	Tarkio	Charles D. Humberd	Barnard
North Central Counties Medical Society (Adair-Schuyler-Knox-Sullivan-Putnam)	2	Spencer L. Freeman	Kirksville	Paul E. Hilton	Kirksville
Ozarks Medical Society (Barry-Lawrence-Stone-Christian-Taney-Newton-McDonald)	8	Leo T. Taylor	Neosho	A. J. Graves	Mount Vernon
Pemiscot	10	P. J. Aquino	Caruthersville	John K. Duckworth	Hayti
Perry	10	Stanley Legner	Perryville	A. E. McDermott	Perryville
Pettis	6	Thomas J. Hopkins	Sedalia	R. H. Stewart	Sedalia
Pike	2	Charles H. Lewellen	Louisiana	Roger F. Christensen	Louisiana
Platte	1	H. Graham Parker	Platte City	H. C. Thurman	Parkville
St. Louis City	3	Robert B. Bassett	St. Louis	Charles S. Sherwin	St. Louis
St. Louis	4	Robert Kingsland	Clayton	B. Todd Forsyth	St. Louis
Saline	6	E. Lee McCorkle	Marshall	M. E. Roehrs	Marshall
Semo County Medical Society (Stoddard-New Madrid-Mississippi-Scott)	10	John Dernoncourt	Charleston	Thelma C. Buckthorpe	Sikeston
South Central Counties Medical Society (Howell-Oregon-Texas-Wright-Douglas-Ozark)	9	J. L. Spears	Cabool	Rollin H. Smith	West Plains
Webster	8	C. R. Macdonnell	Marshfield	E. G. Beers	Seymour
West Central Missouri Medical Society (Bates-Cass-Cedar-St. Clair-Vernon)	6	John M. Cooper	Butler	J. C. Moody	Harrisonville

Committee on Tuberculosis

A Continuing Plan for Eradication of Tuberculosis in Missouri

Approximately twenty years ago, the Committee on Tuberculosis of the American School Health Association initiated a School Certification Program. Certificates—Class A or Class B—are awarded to participating schools if they meet stipulated requirements. These are:

I. Class A Certificate—95 per cent or more of all students from kindergarten through high school, and 100 per cent of the school personnel must be tuberculin tested.

II. Class B Certificate—80 to 95 per cent of the children from kindergarten through high school, and 100 per cent of the school personnel must be tuberculin tested.

To keep certification in force, all who initially are negative to tuberculin must have a repeat tuberculin test biannually, if the reactors in the school are greater than 1 per cent. If the percentage who are positive to tuberculin is less than 1 per cent, repeat tuberculin testing in the school may be extended to a five-year period.

There is in Missouri a group of physicians who are serving as a subcommittee of the American School Health Association Committee on Tuberculosis. This committee will cooperate with the members of the Missouri State Medical Association, the Missouri Division of Health and the Missouri Tuberculosis Association in the program of School Certification.

When it is known where in Missouri tubercle bacilli are concentrated, casefinding can proceed and persist intelligently to the ultimate eradication of tuberculosis.

The Ozark Medical Society is planning a Tuberculosis Casefinding Program with the emphasis on tuberculin testing. This program was initiated by a request from one of the schools in Newton County. It will be the first county in the State of Missouri to start a pilot study of skin testing in the schools, under the Certification Program of the American School Health Association.

The tuberculin test will be done by a team from the Missouri State Division of Health and the Missouri State Sanatorium. The intradermal (Mantoux) method of tuberculin testing will be used. Purified tuberculin derivative (P.P.D.) the dosage of which will be .0001 mg., will be injected intradermally in the forearm. The tests will be interpreted within 48 to 72 hours. The reaction will be read as positive if the induration is 10 millimeters or greater.

It is planned that the tuberculin testing and x-raying of contacts to reactors will be done by family physicians. Newton County physicians have agreed to x-ray reactors and contacts free of charge.

Families and close associates of reactors will be visited by public health nurses. They will explain the significance of a positive tuberculin test, and the importance of finding the source of infection. They will urge all family members to be tuberculin tested, and help to arrange for x-ray of all reactors to tuberculin.

When this study is in progress, a report to the members of the Missouri State Medical Association will appear in MISSOURI MEDICINE.

Ensuing journals will contain reports on tuberculosis casefinding projects where tuberculin testing has been done in varied areas of Missouri. Many projects of this type have gone on through the years. The Tuberculosis Committee is familiar with some of these projects, as they have attained national recognition and publication. The Committee is cognizant, also, of the fact that tuberculin testing has gone on continuously in areas where no data have been published. Physicians are asked to send reports on tuberculin testing surveys to the Tuberculosis Committee, in care of the Missouri State Medical Association. This will help to give all physicians a complete picture of the tuberculosis status in Missouri at the present time. It will also be a guide in choosing where the needs for current tuberculin testing surveys are most urgent.

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Esophageal Hiatus Hernia

Considerations in the Selection of Patients For Operative Correction

JAMES H. GROWDON, M.D., and JAMES T. PARSONS, M.D., *Little Rock, Ark.*

Surgical repair for esophageal hiatus hernia has been applied with increasing frequency during the last decade. Improved surgical technics of repair have been a natural sequence of the increase in knowledge concerning the anatomic and physiologic derangements associated with this disorder.[1, 5, 20] Indications for operative measures have been extended. Numerous publications attest to the success of operative correction and to the minimal risk involved with such a procedure.[1, 6, 13, 15, 20] The logical treatment for a hernia in any area of the body is surgical restoration of normal anatomic relationships. Patients with hiatal hernia whose symptoms are more than minimal and are not completely controlled by medical measures deserve the benefit of surgical repair. In fact, to withhold operation may prove dangerous.[10, 19] Manifestations are often progressive. Fatal complications may occur or the lower esophagus may be so severely damaged from esophagitis and stricture formation that simple hernia repair will no longer be feasible. A more formidable operative procedure will be required to eliminate the stricture and restore esophago-gastric continuity.[2, 12, 16, 21] The success of such a latter procedure is less certain; the morbidity and mortality are much higher.

On the other hand, hiatus hernia represents a common disorder. It occurs in all age groups, being especially prone to occur in females over 50 years of age. The youngest patient in our operative series was 9 months, the oldest 84 years. In routine roentgenographic examinations of the gastrointestinal tract from 5 to 10 per cent of patients will have a demonstrable hernia. Some hiatal hernias are asymptomatic. Some may be temporary such as are seen during pregnancy,[18] in obesity or in infancy[22] when they may be associated with chalasia. Symptoms when present are not specific and may mimic those arising from disease of the cardio-respiratory system, gastrointestinal tract, biliary system, pancreas or other intrinsic disease of the esophagus. Patients have been treated medically for years for other conditions such as angina pectoris before it was realized that a hiatal hernia was at fault. Operations for other conditions, particularly gallbladder disease, have been performed without relief of symptoms. The so-called "asymptomatic" hiatal hernia should be viewed with suspicion. The reverse is also true. Disease of other organs is commonly associated with hiatal hernia. Surgical repair of the hernia cannot alleviate bleeding from a duodenal ulcer or the dyspepsia of gallbladder disease.

Proper selection of patients for hiatal hernia repair depends upon correlation of the symptoms present with the pathology present. It involves determining those patients who will be relieved of symptoms and potentially serious complications. Timing of the operation is important to assure the success of a simple hernia repair and to prevent the necessity of more formidable and less successful surgical procedures. All physicians should be familiar enough with the problem to interpret whether or not a patient's symptoms may be due to his hiatal hernia and, if so, whether medical

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Professor of Surgery, Department of Surgery, University of Arkansas Medical School, Little Rock, Arkansas.

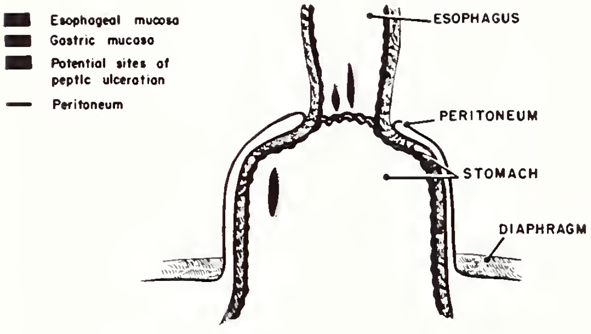
Assistant Resident in Surgery, Department of Surgery, University of Arkansas Medical School, Little Rock, Arkansas.

therapy is indicated or operative intervention should be recommended without delay. With the trend established toward surgical repair of this disorder, physicians can expect to be faced increasingly with the decision of recommending the desirability of surgical repair in a particular patient. This is often a perplexing problem. An understanding of the anatomic and resulting physiologic derangements is essential to arrive at a correct conclusion.

CLASSIFICATION

Esophageal hiatus hernias are classified as sliding (short esophagus type), paraesophageal (parahiatal or rolling type), and mixed (composite type).

Sliding hernias comprise more than 90 per cent of hiatal hernias in our experience. The abdominal esophagus and stomach slide as a unit superiorly through the hiatus into the mediastinum carrying an anterior reflection of peritoneum which forms the anterior wall of the hernia sac. The stomach forms the posterior wall (fig. 1). This dislocation may be permanent or more frequently it is intermittent when abdominal pressure is temporarily increased or when a supine or stooping position is assumed. The displacement of the lower esophagogastric segment above the diaphragm tends to produce incompetence of the cardiac sphincter mechanisms. The esophagus is really of normal length and will reach below the diaphragm with ease.



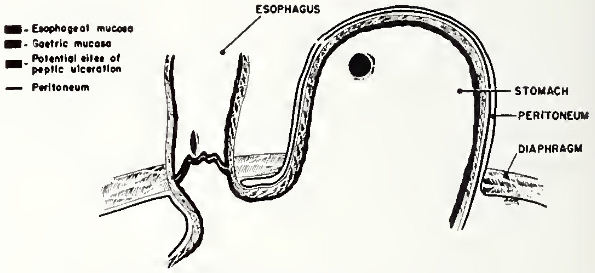
Sliding Hiatal Hernia

Fig. 1. Sliding hiatal hernia—cross-section view. Peptic ulceration may occur either in the lower esophagus or herniated stomach pouch.

Paraesophageal hernias comprise between 5 and 10 per cent of hiatal hernias. With this condition the esophagogastric junction remains below the diaphragm. The cardiac sphincter usually remains competent. Only the stomach passes superiorly through the diaphragm. Varying amounts of the fundus and greater curvature side of the stomach roll upwards through the hiatus alongside the esophagus for varying distances. This tends to draw the body and pylorus of the stomach to the left. In extreme examples the stomach appears to be upside down (fig. 2).

The mixed or composite type of hernia comprises aspects of both the sliding and paraesophageal varieties in varying proportions.

The rare congenital true short esophagus which is included in some classifications of hiatal hernia is not a hernia in the true sense. The stomach was never an abdominal organ. An esophagus whose lower segment is lined with gastric mucosa may be associated with a sliding hiatal hernia.[3, 4] These conditions must be differentiated from simple sliding hiatal hernia. Therapy is different. Ordinary hiatal hernia repair will be impossible or will fail to relieve symptoms and may aggravate the situation.



Parahiatal (paraesophageal) Hernia
sphincter mechanism usually remains competent with no esophagitis
peptic ulceration if present usually is in the herniated gastric pouch

Fig. 2. Paraesophageal (parahiatal) hernia. The diaphragmatic muscle fibers between the herniated stomach and esophagus are exadurated for demonstration. Often at operation they are quite thinned out and may not be apparent.

CLINICAL MANIFESTATIONS

The majority of symptoms associated with hiatus hernia are the result of reflux of gastric secretions into the esophagus or herniation of the stomach into the chest. Intermittent symptoms induced or aggravated by postural positions which favor herniation of abdominal structures into the chest are highly suggestive of hiatus hernia. Symptoms are usually chronic and progressive but may be acute and severe with little or no previous warning. Small hernias may be associated with severe symptoms. Large hernias are more likely to produce symptoms and to develop complications.[19] Occasionally abdominal organs other than the stomach also herniate through the hiatus to become obstructed, distended or strangulated.

Reflux of gastric secretions occurs because the mechanisms entering into the cardiac sphincter action become incompetent when the lower esophagus and adjacent stomach ascend into the chest above the diaphragm. This sphincter action is complex and incompletely understood. It probably depends upon a balance of a number of factors which include the intrinsic muscular fibers of the esophagus, the right crus of the diaphragm, the acute angle of entrance of the esophagus into the stomach and the valvular action of the gastric mucosa adjacent to the esophagogastric junction[17] (fig. 3). The mucous membrane of the esophagus is quite susceptible to the irritative and digestive properties of acid peptic juice. Reflux esophagitis, peptic ulceration and eventually stricture formation of the esophagus can result. All the complications of peptic ulcer—bleeding, perforation, obstruction and malignant degeneration—may develop. Substernal or epigastric pain, heart burn, regurgitation, difficulty in swallowing and vomiting are common complaints. Hematemesis may be acute and severe with associated melena. More commonly, bleeding is less severe and chronic. It may be manifest only as an unexplained secondary anemia.

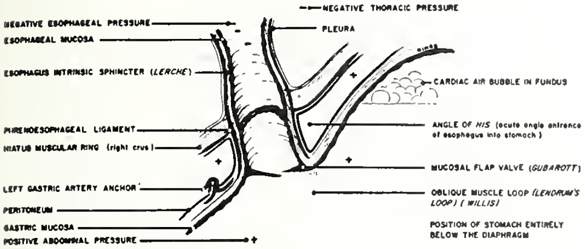

NEGATIVE THORACIC PRESSURE
NEGATIVE ESOPHAGEAL PRESSURE
ESOPHAGEAL MUCOSA
PLEURA
ESOPHAGUS INTRINSIC SPHINCTER (LERCHE)
CARDIAC AIR BUBBLE IN FUNDUS
PHRENOESOPHAGEAL LIGAMENT
HIATUS MUSCULAR RING (right crus)
ANGLE OF HIS (acute angle entrance of esophagus into stomach)
MUCOSAL FLAP VALVE (GUBAROTT)
LEFT GASTRIC ARTERY ANCHOR
OBLIQUE MUSCLE LOOP (LENDRUM'S LOOP) (WILLIS)
PERITONEUM
GASTRIC MUCOSA
POSITION OF STOMACH ENTIRELY BELOW THE DIAPHRAGM
POSITIVE ABDOMINAL PRESSURE
-
+

Fig. 3. Factors influencing sphincter action at the esophagogastric junction. Many factors are at play to maintain a balance. Competency of sphincter action is a summation. Competence may or may not be lost with a change of one or several factors. This partially accounts for the variability of symptoms of gastric juice reflux in patients with hiatus hernia.

Displacement of the stomach through the hiatal ring into the chest may result in its distention or partial obstruction. Emptying may be incomplete. Secretions or ingested food may puddle above the diaphragm. This favors regurgitation into the esophagus. The heart or lungs may be compressed. Postprandial epigastric fullness, substernal discomfort, sour eructations, nausea and vomiting are common symptoms. Precordial pain and shortness of breath may occur. Occasionally pain may radiate into the back or neck and left arm to simulate angina pectoris. A gastric ulcer may develop in the pouch of herniated stomach, its development enhanced by retained gastric secretions or mechanical factors. The symptoms and complications of gastric ulcer may become manifest. The severe exsanguinating hemorrhages associated with hiatal hernia usually arise from ulceration of the stomach rather than the esophagus.[4]

Symptoms of gastric reflux and esophagitis are prone to occur in the sliding and mixed types of hiatal hernias. Those arising from herniation of the stomach into the chest are present in all three types. Table 1 summarizes the symptoms present in 51 patients operated on for hiatal hernia at the University Hospital.

TABLE I
SYMPTOMS IN 51 CASES OF HIATAL HERNIA

Pain	49	96.5%
Substernal	11	21.5
Epigastric	20	39.2
Both Epigastric & Substernal	18	35.3
Severe	31	60.8%
Mild or Moderate	18	35.3
Burning	37	72.5%
Sharp	12	23.5
Dyspnea	11	21.5%
Regurgitation	37	72.5%
Mild	14	27.4
Severe	23	45.1
Hematemesis	9	17.6%
Severe	2	4.0
Postural Influence of Symptoms	26	59.0%

DIAGNOSIS—SELECTION OF PATIENTS FOR OPERATION

Once the history leads one to suspect the presence of a hiatal hernia, roentgenographic studies are necessary to confirm the diagnosis. Occasionally a PA chest film will disclose a gas filled organ with or without a fluid level just above the diaphragm contrasted against the cardiac shadow. Usually study after ingestion of a barium meal is necessary. The radiologist must be forewarned of the possible diagnosis. Special positioning in the prone, supine and oblique Trendelenburg positions or special measures to increase intra-abdominal pressure may be required to demonstrate the hernia. Irregularities of the esophageal mucosa indicating esophagitis or a stricture may be noted. An ulcer niche may be present in the lower esophagus or proximal stomach. Usually ulceration in esophagitis is superficial and is not visualized. Differentiation of sliding and paraesophageal types of hernia is sometimes possible radiologically, but this is not an accurate index in many instances (figs. 4 and 5).

Confirmation of the diagnosis of hiatal hernia by roentgenographic examination demands esophagoscopic studies to determine the presence and degree of esophagitis or stricture, and to rule out other intrinsic disease of the esophagus. Esophagoscopy is also important to determine the level of junction of esophageal and gastric mucosa. This factor will influence the operative procedure if it is suspected that a true acquired or congenitally short esophagus is present. Ordinarily operation should not be delayed if esophagitis of any degree is present or if peptic ulceration of the lower esophagus or herniated stomach pouch is demonstrated.

A large group of patients have roentgenologically confirmed hiatus hernias and symptoms suggesting esophagitis but objective evidence of the latter is lacking on esophagoscopy. This condition has been termed pseudoesophagitis. Similarly patients may have symptoms associated with gastric herniation with or without pseudoesophagitis. Evaluation of these groups of patients for relief of symptoms from operative hernia repair is more difficult. On the other hand the decision may be just as urgent. Symptoms may be making the patient's life miserable or actually be incapacitating.

In our experience one of the most valuable aids in arriving at a decision with these groups of patients is a period of hospitalization for closely controlled observation. Most important is the fact that symptoms resulting from a hiatal hernia are incited or aggravated by postural positions which tend to cause or to increase herniation of the abdominal contents into the chest. Reclining, stooping or straining, particularly after a heavy meal, may precipitate or increase symptoms. After retiring at night patients not infrequently will arise from bed and walk about the room to secure relief. Belching, regurgitation of food or elevating the head of the bed may temporarily eliminate symptoms. Postural relationships of this sort which were not elicited during initial questioning and examination of the patient have been repeatedly verified during a period of hospitalization. One striking example was a patient whose chief complaint was intermittent excruciating pain inferior to the left scapula who was demonstrated to have a hiatal hernia roentgenologically. Postural relationship to his episodes of pain was confirmed on several occasions during hospital observation. At laparotomy no other organic disease was noted and repair of his hiatal hernia gave prompt and permanent relief of his bizarre manifestation. In nearly 60 per cent of our patients subjected to operative repair of hiatal hernia we have confirmed postural relationship to symptom complexes.

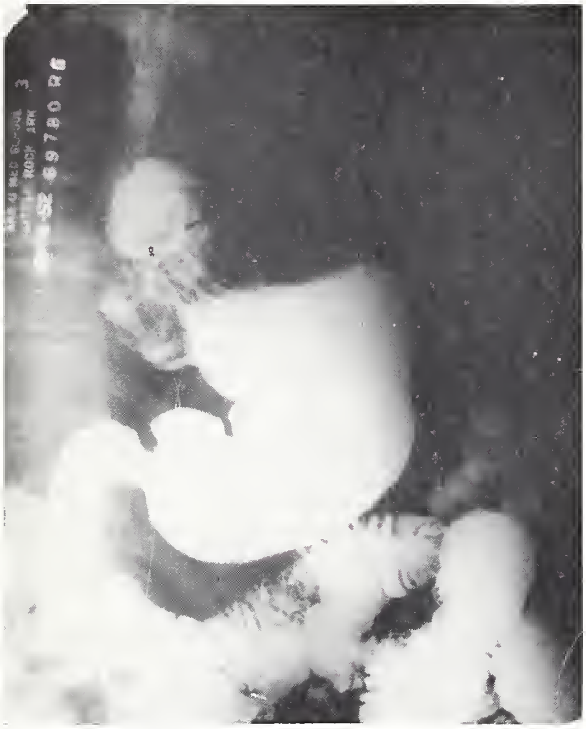


Fig. 4. Sliding hiatal hernia. Note the radiating folds of gastric mucosa converging at an ulcer crater in the nerniated stomach pouch.

Additional aids have been suggested for the correlation of symptoms with the presence of a hiatus hernia. Berry and coworkers have recommended pneumoperitoneum to prevent protrusion of the stomach into the chest. Relief of symptoms occurred in 12 of 15 patients studied. Fourteen of the 15 became asymptomatic following surgical repair.[7] Bernstein and Baker report a correlation between pseudoesophagitis, esophagitis and hiatal hernia when the esophagus is slowly perfused with tenth normal hydrochloric acid.[9]

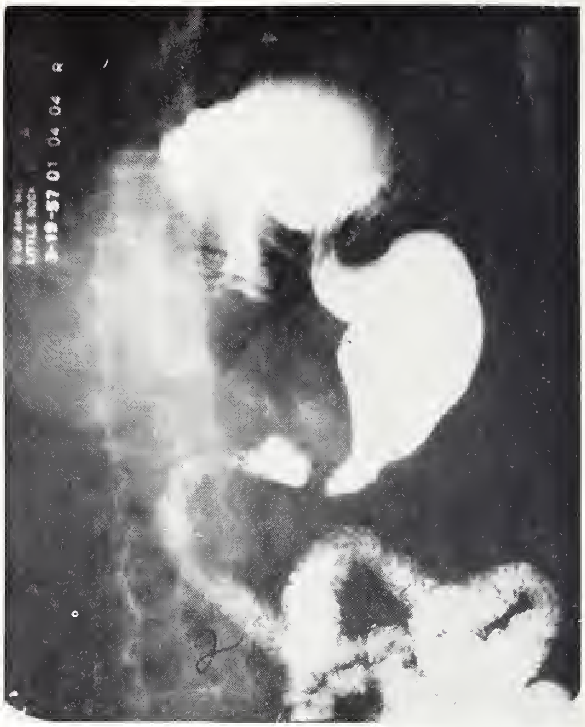


Fig. 5. Paraesophageal (parahiatal) hernia. Note the upside down appearance of the proximal stomach and the displacement of antrum to the left.

Approximately one third of the patients with hiatal hernia and symptoms compatible with this disorder will have coexisting disease of other organs capable of producing similar symptoms. For this reason it is essential that all patients with suspected symptomatic hiatal hernia be carefully studied to verify or exclude this possibility. Cardiac or pulmonary disease, gastric or duodenal ulcer, cholecystitis and pancreatitis are the most commonly associated. Nearly 25 per cent of our patients undergoing surgical repair for hiatal hernia have associated gallbladder disease. At times coexisting disorders cannot be conclusively eliminated. The source of upper gastrointestinal bleeding may be especially difficult to determine conclusively. Most associated disorders which are surgically remediable are intra-abdominal. In this group of patients in whom symptoms are present and compatible with either the hiatal hernia or a coexisting intra-abdominal lesion or when the latter cannot be excluded, a laparotomy should be performed to repair the hiatal hernia and correct concomitant disease at the same operation. This is particularly important when a sliding hiatal hernia and duodenal ulcer coexist. In this situation the stage is set for the severe consequences of esophagitis if they have not already become manifest.[12] Surgical therapy should not be delayed.

OPERATIVE TREATMENT

Surgical repair of hiatus hernia attempts to restore normal anatomic relationships of the diaphragm, lower esophagus and stomach. The operation described by Allison[1] with or without minor modifications has become the most widely practiced procedure during the last decade. The hernia is reduced and the sac eliminated by plication or excision. The dilated muscle fibers of the esophageal hiatus, which usually are formed from the right crus, are approximated about the esophagus posteriorly to reduce the hiatus to normal size and prevent future upward displacement. The lower esophagus is anchored to the subdiaphragmatic fascia and peritoneum adjacent to the circumference of the hiatus. This simple hernia repair is all that is required in the vast majority of patients with symptomatic hiatus hernia. The operation can be performed using either an abdominal or thoracic approach. In our experience the abdominal route is more advantageous for most patients.[14]

In selected patients, particularly those with esophagitis and concomitant ulcer diathesis, additional procedures to reduce gastric acid production, eliminate associated peptic ulcer of the stomach or duodenum and assure prompt drainage of gastric contents are probably advisable.[8, 12, 16, 21] Repair of the hiatal hernia remains necessary and should not be neglected when these ancillary procedures are performed.

SUMMARY

Symptoms associated with esophageal hiatus hernia result from anatomic derangements which can be corrected surgically. Logical treatment is operative repair of the hernia. Some hiatus hernias are asymptomatic and benign in their course; others are progressively disabling and may threaten life. To delay surgical therapy may prove disastrous. Proper selection of patients for operation is difficult because symptoms are not specific for hiatal hernia but may mimic or arise from disease of other organs. Correlation of symptoms with pathology present is the guide to the correct decision. This requires a knowledge of the associated pathologic anatomy and physiology. In general, patients whose symptoms are disturbing to the living of a normal, comfortable life deserve the benefit of surgical elimination of their difficulties.

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CIVIL DEFENSE CONFERENCE

The 10th annual County Medical Societies Civil Defense Conference will be held in Chicago, November 7 and 8 at the Morrison Hotel.

Purpose of the conference, which is sponsored by the American Medical Association's Council on National Defense, is to inform and assist medical and health personnel for their roles in the event of a disaster.

Those in attendance will have opportunity to participate in workshop sessions concerning medical preparedness to cope with disasters; discuss and exchange information dealing with emergency medical services; gain information on the availability of pamphlets and articles devoted to the medical and health aspects of civil defense, and hear outstanding speakers report on appropriate civil defense and disaster topics.

Regional Chemotherapy

With Extracorporeal Circulation for Advanced Malignant Disease

V. L. WILLMAN, M.D., AND C. ROLLINS HANLON, M.D., *St. Louis*

THE VALUE OF alkylating agents in the management of nonresectable malignancy has been well established.[2, 7] It is known that the effect of these agents depends on their cytotoxic action during cellular proliferation.[5] Rapidly proliferating tumor cells are affected to a greater extent than are most normal cells. However, the toxic effect on such rapidly proliferating normal cells as those of the hemopoietic system limits the dosage of the alkylating agents by systemic administration.

In an attempt to increase the concentration of cytotoxic agent at the site of the tumor without exceeding the tolerable effect on the hemopoietic system, Klopp[6] introduced the technic of intra-arterial injection of the agent into the regional blood supply of the tumor bearing area. When nitrogen mustard was given intra-arterially with concomitant venous occlusion, there seemed to be an enhancement of the effect on the tumor without increase in systemic toxicity. This might be anticipated from the observation that nitrogen mustard is fixed in tissues during an exposure of five to ten minutes.[8]

In an attempt to increase even more the concentration of the agent at the tumor site while limiting its systemic concentration, Creech[4] introduced the technic of regional isolated perfusion employing an extracorporeal pump-oxygenator. It is possible that the associated hyperoxygenation potentiates the tumoricidal effect of cytotoxic agents, thus adding to the value of this technic.[1] Creech has a large experience with this procedure in various regions including the extremities, lung, pelvis and bowel.[3] The technic is exemplified by presentation of one of our cases of extremity perfusion.

CASE REPORT

Nine years prior to being treated by us, a malignant melanoma had been excised from the medial aspect of the right ankle of a 39 year old housewife. Two years later there was evident recrudescence of the disease. A wide excision of the area was carried out along with an inguinal node dissection. Positive nodes were recovered. There was no local evidence of disease for seven years until induration in the primary area led to a biopsy which was positive for malignant melanoma. An attempt at local excision was abandoned when exploration revealed involvement of the ankle joint by tumor. The patient was referred to us by Dr. Warren Marston and regional perfusion with nitrogen mustard was chosen as an alternative to amputation.

Employing spinal anesthesia, the right femoral artery and femoral vein were exposed through an inguinal incision. Small plastic catheters were introduced distally into these vessels and a tourniquet was applied about the groin. A Steinman pin in the iliac crest facilitated retention of the tourniquet in a high position. The extremity was incorporated in an extracorporeal circuit by aspirating blood from the femoral vein, passing it through a Kay-Cross disk oxygenator and pumping back into the femoral artery (fig. 1). The rate of perfusion was regulated by monitoring the pressure at the femoral artery. During a perfusion of 30 minutes, 20 mg. (0.4 mg./Kg.) of nitrogen mustard were introduced into the arterial line. The catheters were then removed, the vessels reconstituted and the incision closed.

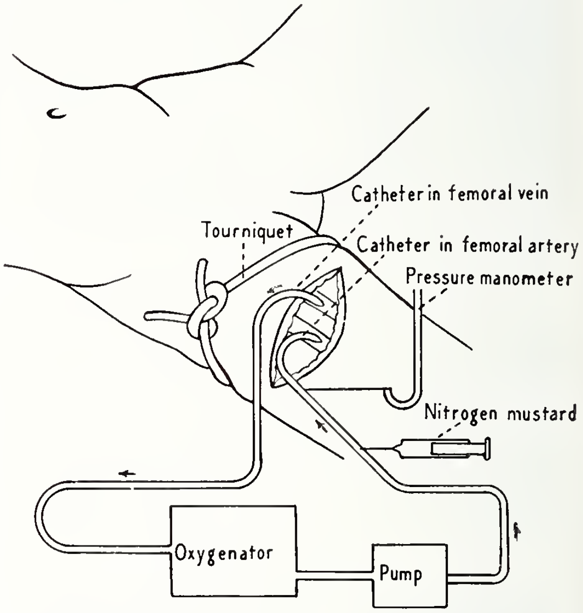

Fig. 1. The perfusion technic consists of isolating the circulation of the part by tourniquet, aspirating venous blood, oxygenating it and pumping it into the arterial system of the involved part. Nitrogen mustard is added to the arterial line.

The patient's leg became quite warm during the first three postoperative days but caused her little discomfort. There was transitory mild depression of the white blood count. She was back to her household duties on the fifth day after operation.

During the next six weeks, there was gradual diminution in the size of the tumor and of the ulcerated area of the ankle. It was elected at this time to repeat the perfusion using the same technic and dosage. A biopsy taken at this time was not recognizable as melanoma. The patient again tolerated the procedure well and left the hospital on the third postoperative

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From the Department of Surgery, St. Louis University School of Medicine, St. Louis, Missouri.

Aided by Grant CT-619 (C10), U.S.P.H.S.

Which Patients Require Cycloplegia for Refraction?

PAUL W. MILES, M.D., *St. Louis*

THE RASH OF ARTICLES in recent years about the new cycloplegic eye drops makes one suspect that many ophthalmologists are using them in every refraction. Perhaps this is an unfortunate reversion to the pre-Lancaster Donderian era.

Cycloplegic refraction has been a proud tradition in ophthalmology. Some, like Edward Jackson, have habitually prescribed exactly what was found under cycloplegia in every case. For a physician with a dynamic personality and almost hypnotic attraction, this was apparently successful. However, I have querulous letters from young men who tried this. In the beginning of practice, one must depend on refraction to gain the confidence of the public. If the patients will not wear your glasses, you might as well leave town.

To depend on cycloplegic drops because they were used routinely at school, or to use drops routinely for refraction merely to distinguish a medical from an optometric examination is ridiculous. No one questions the use of cycloplegia in children or for teaching refraction, but there is a great advantage in learning the tricks of a dry refraction in private practice.

A HISTORICAL NOTE

The effect of atropine to dilate the pupils has been known from the time of Christ. The name "atropine" came from Atropos, the mythologic elder Fate who cut the thread of life. Pliny[1] stated that herbs could be helpful as a treatment for eye infections by dilating the pupil. During the 16th century, mydriatics were used by Italian women for cosmetic purposes—belladonna—beautiful lady.

The additional effect of atropine on accommodation must have been known, but there is evidently no literature on it until 1811. A London oculist, Dr. Wm. Wells,[2] saw a patient suffering with dilated pupils who " . . . had acquired the sight of an old man by losing suddenly the command of the muscles by which the eye is enabled to see near objects distinctly." The patient had been handling the juice of the herb belladonna. Dr. Wells found that the juice reduced the accommodation of a normal eye 1 diopter in 30 minutes,

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Assistant Clinical Professor of Ophthalmology, Washington University School of Medicine.

Chemotherapy—Continued

day. In the next two months, the ulcer healed completely and the area became quite supple.

This case report exemplifies the use of regional perfusion technic for malignant neoplasm without suggesting that this patient has been cured or that cure may be expected in any ineradicable malignancy using this technic with currently available agents. This patient has an unusual, slow growing lesion which will have to be followed for many years before its behavior can be assessed. However, it had already reached a disabling stage, insusceptible to any standard surgical extirpation except amputation and the perfusion technic has permitted prompt healing and rehabilitation. There is no contraindication to repeated use of the same technic if local recrudescence should call for further treatment.

SUMMARY

An application of the technic of isolated regional perfusion of tumor bearing areas with chemotherapeutic agents by means of extracorporeal circulation is described. It is proposed as a valuable method of palliation in selected cases of ineradicable cancer in certain areas of the body.

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and 6.5 diopters in an hour. He was impressed by the fact that this subject changed from a slightly myopic to moderately hypermetropic after belladonna.

Other famous men like MacKenzie, von Graefe and Helmholtz experimented with cycloplegia, but it remained for Donders[3] to promote the routine use of atropine for refraction. Another physician, Landolt,[4] wrote "To insure a state of rest for the eye, the accommodation must be paralyzed* by a mydriatic such as atropine, duboisine or homatropine."

In 1891, Dr. Chisholm wrote, "Since 1883 I have been using homatropia with such steadily increasing confidence that I now rarely use anything else. Judging from the entire satisfaction which homatropia gives me in my refractive work, I consider a physician culpable who robs a working man or a sewing woman of a week's daily bread through his preference for the more persistent atropia." It was obviously common practice to dilate the eyes of every patient.

By the turn of the century, physicians began to doubt the need for such a routine. Dr. Howe wrote in 1908,[6] "Our aim is to test the condition of the eyes as they are in action, not as they are when artificially at rest. . . . While it is possible to obtain an accurate and satisfactory correction of the ametropia without a cycloplegic, it is certainly more difficult to do so than with its assistance; and taking into account the inconvenience to the patient, it is simply a matter of judgment in each case. . . . The practice of invariably resorting to a cycloplegic is as reprehensible as not to use it at all."

The father of the fogging refraction technic was a physician, Dorland Smith.[7] He used excess plus sphere in order to make sure the retina could never be presented with a stimulus to accommodate even for a moment. He did apparently pay considerable attention to a balance of the two eyes in acuity while fogged to a 20/40 level. He would then reduce the plus power equally in each eye for the final prescription. In my hands, this technic often results in an unwearable blur for the dominant eye. I am also convinced that in some cases, a blur to the 20/40 level is as likely to stimulate efforts at accommodation as it is to relax it.

Crisp,[8] like Jackson, was a Denver ophthalmologist. One can imagine the debates they must have had on routine cycloplegia. In 1939, Crisp wrote, "One may readily acknowledge that it is not absolutely necessary to resort to cycloplegia in every refractive examination even in fairly young persons, although very few ophthalmologists venture to deny the necessity of employing cycloplegics in children of preschool age. It is to be regretted that many medical refractionists . . . base their measurements almost entirely upon the retinoscopic findings, supplementing these findings at best with a hurried and inadequate check-up of the corrected vision at the trial case."

One reason for the present excessive use of cycloplegics is in the method of training residents. In a large clinic, there are too many people crowded together: crying babies, scuffling children, foggy cigar smokers. The relaxation of accommodation or of anything else is out of the question. In many cases the level of intelligence of the patient is such that refraction without drops would be difficult. The cycloplegic habit forms by necessity. Later when the ophthalmologist begins his private practice, to use an unfamiliar technic seems too risky.

CYCLOPENTOLATE HCL (CYCLOGYL)

In the past, I strictly defined the office use of eye drops as mydriatics and as cycloplegics. I used 10 per cent neosynephrin when cycloplegia was not desired, and homatropine when it was. Now, the cyclopentolate[9] often serves either purpose. I have used it regularly in the office since 1952. The 1 per cent solution is best for all but the very dark pigmented eyes, in which I use 2 per cent. One drop is adequate if the doctor puts it in himself and knows it has bathed the cornea.

Cyclopentolate is the fastest acting mydriatic or cycloplegic I have known. If refraction cannot be done exactly 25 minutes after administration, one must add another drop. Cycloplegia wears off in 3 or 4 hours, but the mydriasis persists 24 hours. Cyclopentolate stings no more than 5 per cent homatropine, and certainly does cause less redness.

The drug has not in my experience caused any toxic general reaction like that seen occasionally with atropine in infants. There is no need to compress the punctae.

Motility cases which in my practice formerly required three day atropine are now tested more adequately with the cyclopentolate. In many cases, the parents were unable or unwilling to use atropine drops properly.

DISCUSSION

To refract patients without cycloplegic, one must know what conditions stimulate accommodation and avoid them. One must know what conditions promote relaxation and provide them.

During and since the war, there has been great interest in the phenomenon "night myopia." In light or in dark, if the visual field is empty of objects to attract fixation or land marks to judge relative distances, the eyes gradually increase the accommodative tone to about 2 diopters. Therefore, the refraction room should have light, and it should have visible detail.

Mechanical factors which stimulate accommodation include bright spots on the rear of the trial frame, reflections from the lenses or frames into the eye being tested, finger prints or dust on the lenses, density filters and glare. The refraction room shape should suggest distance, not nearness of target. Convergence on objects nearer than 30 feet can slightly affect accommodative tone. Vestibular stimulation causes accommodation so when refraction is done on board ship, please use the cycloplegic.

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*Beware the use of the word "paralysis"—it brings up mental images of polio and permanent injury.

The patient should be sitting comfortably, but the gaze should be directed straight ahead because downward gaze may produce as much as 1 diopter of accommodation.

All agree that in refraction, the retinal image must not be permitted to move post-retinal in either meridian even for a moment. Just how fogged the image should be for determination of the astigmatism deserves discussion. Lancaster suggested 0.5 diopter of excess plus lens with the 20/40 line as a target. I have found that patients cannot distinguish one blur from the other at this level, but that they can usually detect a change of 0.12 diopters power when blurred only +0.12 or +0.25 diopters, while observing the 20/25 line. Insufficient plus sphere during refraction will provoke a wrong answer on the dial—that is, minus cylinder will blur a black line in its axis rather than sharpen it.

At attention, the ciliary muscle is constantly undulating so that the retinal image goes in and out of focus about 0.12 diopters. Such a mechanism tests the focus and will keep it set right, just as one keeps fiddling with the focus on a pair of binoculars while watching a horse race. The undulation is fairly slow because the ciliary is smooth muscle. It tends to resist greater changes because it is a muscle of position. Once it is set in one position, little innervation is required to keep it there. This has surprised those who have studied the so-called fatigue of accommodation which is difficult to demonstrate. Eye strain is more commonly oculo-rotary than it is ciliary.

If ciliary spasm occurs during refraction, there is a sudden blur which requires minus sphere. Put on +0.25 sphere and larger test type. If the condition does not improve in a minute, use drops.

TO ITEMIZE THE ARGUMENT

In favor of the routine use of cycloplegia:

1. Cyclopentolate acts so quickly and wears off so quickly that loss of time for doctor and patient is minimal. Since drops must be used in children and in nervous patients, why bother the brain with a decision in each case? Do a post-test and use drops in all.

2. Retinoscopy is easier in most cases under cycloplegia. There is no struggle during refraction to keep the image preretinal. The depth of focus is so short that slight changes in lens power make a great difference in visual acuity.

3. Ophthalmoscopy of the fovea and retinal periphery requires mydriasis.

4. Refraction room length is less critical under cycloplegic. With a 14 foot working distance, one should change the final prescription toward the minus 0.25 diopters with or without cycloplegic.

Against the routine use of cycloplegic:

1. Busy people do not want drops if the tests can be adequate without them. One cannot dilate one eye today and the other tomorrow. Children and adults are often worried about the possible permanent effect of eye drops, and remain dubious after reassurance.

2. During refraction with the pupil dilated, a patient may see two or more superimposed retinal images of one target. The center of the cornea is optically superior, while the periphery is flatter and more astigmatic. There may be considerable difference in refraction before and after cycloplegic, and one may be unduly influenced by the cycloplegic findings. It is difficult to prescribe as little as +0.75 diopters for each eye when under cycloplegic +2.50 is required. Yet the smaller power may be the only wearable prescription.

3. Since the cycloplegic method requires two refractions plus a test for residual accommodation, it is costly in time for both doctor and patient.

4. In adults with anatomically narrow angles, there is a chance of inducing acute congestive glaucoma. In such patients there is further loss of time in the office for miosis.

CONCLUSION

While the newer drugs have improved conditions markedly, cycloplegic refractions are still costly in time for both doctor and patient. It is my opinion that for routine refraction of eyes which give no indication of abnormality, there is no need for routine cycloplegia. Any slight excuse should tip the scale in favor of the use of cyclopentolate HCl, however. It should be used routinely in first refractions of children, and in patients with a motility problem.

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Credit is due Robert E. Bannon for this bibliography except items 7 and 9: The Use of Cycloplegics in Refraction, Am. J. Optom. Monograph 37, November, 1947.

"Y" Scrotoplasty

In Repair of Huge Inguinoscrotal Hernia

DONALD R. DAVIS, M.D., AND CHRISTOPHER Y. THOMAS, M.D., *Kansas City*

ALTHOUGH THE SCROTUM is capable of remarkable return toward normal after prolonged and extensive stretching with huge inguinoscrotal hernias, occasionally it is desirable to reduce the size of the scrotum with a suitable plastic procedure at the time of hernia repair. The redundant scrotum can be a postoperative problem to the patient from the standpoint of hygiene, comfort and appearance. The resultant emotional factors involved may limit the patient's return to completely normal activities. While most persons undergoing surgery for large hernias are well conditioned to tolerating some degree of scrotal redundancy postoperatively, the concomitant performance of scrotoplasty adds little to the operative procedure and yields a result considerably more satisfactory for the patient.

In instances of huge inguinoscrotal hernias it may be desirable to perform orchidectomy as part of the hernia repair and it is with this operation that scrotoplasty is especially desirable. When concomitant orchidectomy has been done the scrotum remains as a thinned-out, redundant, empty bag without a function to perform. This excessive and redundant tissue is a nuisance postoperatively because of the tendency for accumulation of serum. The scrotum must be drained dependently, obliterated with properly positioned sutures, or reduced by suitable plastic operation. Dependent scrotal drainage has never been completely satisfactory in our experience as the scrotum is a difficult appendage to bandage securely and there is perpetual soiling of the patient's gown and bedclothing with serum. Furthermore, the redundant scrotum is in close proximity to the anus wherein a dependent drain opening is amenable to contamination with stool. This is enhanced by the awkwardness the patient experiences in using a bedpan, bedside commode or toilet stool. One of us (D.R.D.)[1] has occasionally placed the redundant scrotum on the abdomen, securing it in position with elastic adhesive plaster with gentle pressure, in an effort to inhibit the accumulation of intrascrotal serum. This, too, has not been entirely satisfactory in that it requires prolonged urinary drainage via catheter and serum accumulations still occur in spite of the effort to prevent them. The positioning of sutures obliterating the hollow of the scrotum is fairly effective but is somewhat tedious to perform, it increases fibrous proliferation within the scrotum with resultant thickening, and scrotal serum loculations are still apt to occur. Partial resection of redundant scrotum with suitable reconstructive maneuvers, either unilateral or bilateral, can return the scrotal pouch to perfectly normal size and obviate undesirable serum accumulations. It can be carried out conveniently as a part of the repair. It does not require dependent drainage; it adds practically nothing to the operating time, and it shortens the patient's morbidity, hastening his dismissal from the hospital and return to useful life.

TECHNIC OF SCROTOPLASTY

It is our practice to perform "Y" scrotoplasty on all patients coming to operation for huge inguinoscrotal hernias and in whom concomitant orchidectomy has been done as a part of the hernia repair. If the hernia is unilateral, orchidectomy is carried out in almost all instances in older men. If the hernia is bilateral and both sides are huge, orchidectomy is usually done on the left and this is followed by left "Y" scrotoplasty. Unless there is some reason for doing otherwise, the left side is selected for orchidectomy and scrotoplasty because huge hernias involving the left inguinal region almost always present a sliding component involving the sigmoid colon. It is felt that a more secure barrier against recurrence of hernia can be constructed in sliding hernias if orchidectomy is carried out as a part of the repair.

When the decision for scrotoplasty has been made, it can be done either by simply extending

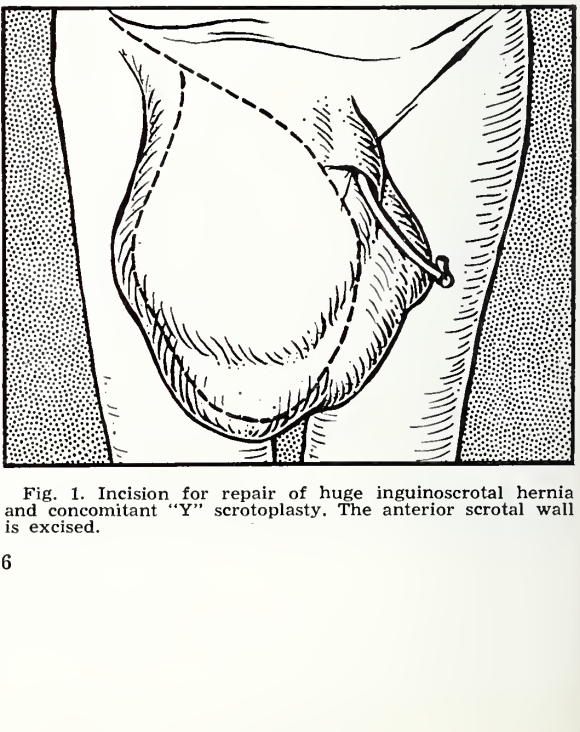

Fig. 1. Incision for repair of huge inguinoscrotal hernia and concomitant "Y" scrotoplasty. The anterior scrotal wall is excised.

the groin incision into anterior scrotum or through a separate scrotal incision. We prefer to extend the groin incision. The incision is divided at the level of the upper scrotum and each limb extended over anterior scrotum circumcising an ellipse and excising the anterior scrotal wall (fig. 1). The

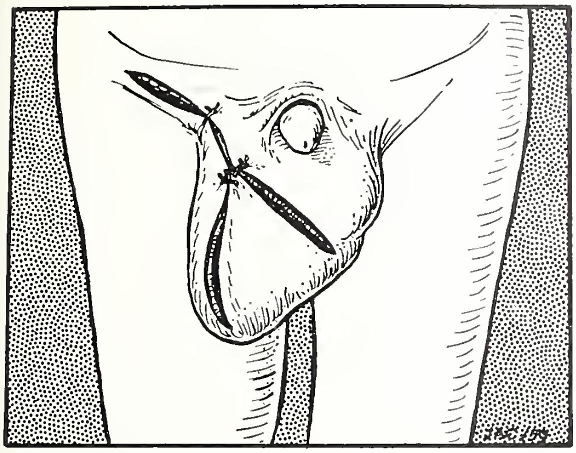

Fig. 2. The dependent portion of scrotum is brought forward and upward and sutured to each side of the upper anterior scrotal incision to form a "Y" plasty.

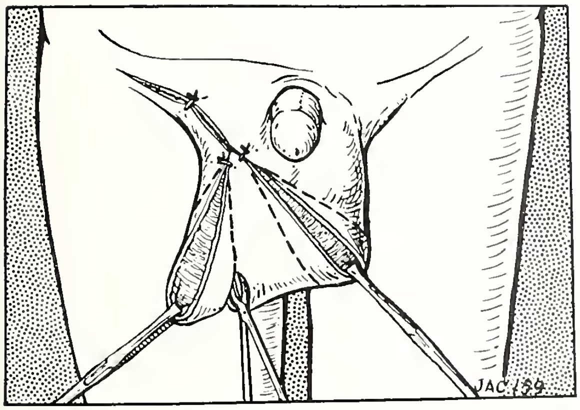

Fig. 3. Using a curved dissection scissors, redundant "corners" of tissue are trimmed away on each limb of the "Y."

most dependent portion of scrotal remnant is grasped and brought forward and upward to suitable approximation with each side of the upper anterior scrotal incision and anchored with two interrupted sutures of silk (fig. 2). With Allis tissue forceps attached to the most dependent portion of each limb of the crude "Y" two or three sutures of absorbable catgut are inserted into the dartos tunic on each side to obliterate the scrotal cavity. Then, using a curved dissection scissors, redundant tissue on each limb of the "Y" over the lower scrotum is trimmed away to fashion the scrotal remnant into a spherical pouch (fig. 3). The skin is then approximated with interrupted sutures of silk without drainage (fig. 4).

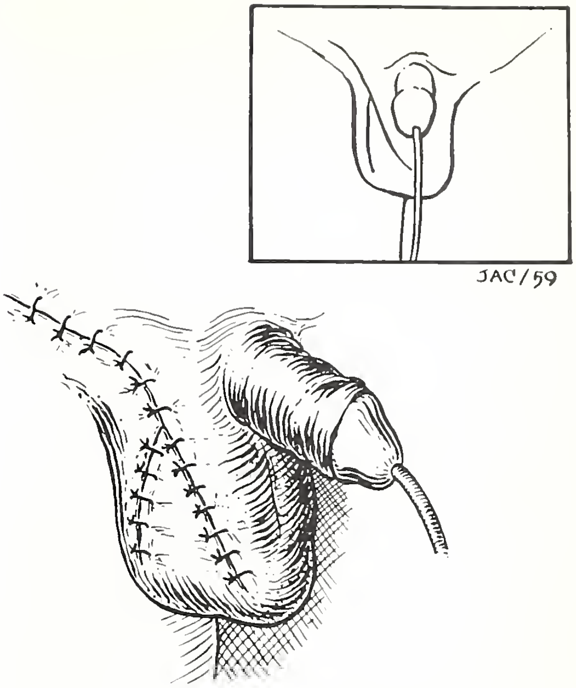

Fig. 4. The wound is closed without drainage. Note the scrotal remnant is now a spherical pouch.

The patient is fitted with a scrotal suspensory with leg straps following the completion of the operation and this is maintained in position for 48 hours when the initial dressing is removed. If there is no drainage from the wound it is left exposed to the air without a dressing for the remainder of the healing period. We have been favorably impressed with the open treatment of groin and scrotal wounds as soon as they are free of drainage; wounds in this area are quickly macerated by perspiration trapped beneath a snug

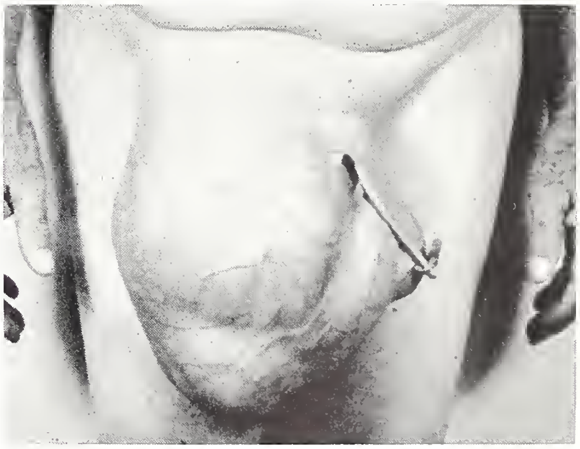

Fig. 5. Preoperative photograph of patient with huge right inguinoscrotal hernia treated by hernia repair with concomitant right orchidectomy and "Y" scrotoplasty.

Ichthyosis

The Use of Sodium Chloride Topically

THOS. F. B. DARNELL, M.D., *Columbia*

Because of overloaded curricula in medical schools, some of the less serious, though common, diseases of the skin are sometimes overlooked or neglected in teaching dermatology. This is probably true in ichthyosis and xerosis. I find that few general practitioners have heard of the use of sodium chloride in the treatment of ichthyosis. Such treatment is not mentioned in many of the textbooks on dermatology.

Ljungstrom[1] in 1941 advised the use of sodium chloride in xerosis. He used 10 per cent sodium chloride in hydrous wool fat daily and daily baths of 3 per cent sodium chloride. Later Gordon[2] used a similar regime, plus vitamin A, bile salts and neostigmine.

I began using a modification of Ljungstrom's treatment while in the army in 1945. Since then I have used it in private practice and university clinics. I prescribe 5 per cent sodium chloride in wool fat to be applied once or twice daily and advise normal saline baths once or twice daily. The ointment is compounded by dissolving sodium chloride in water and then mixing this in anhydrous or partially hydrous lanolin.

The treatment is particularly useful in the cool or cold months when there is less sweating and accordingly the xerosis (or ichthyosis) is in evidence or much worse. Results, as replacement therapy, have nearly always been excellent—and to the patient, miraculous.

909 University Avenue

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Scrotoplasty—Continued

and air-tight dressing. Because the inguinoscrotal region appears to be relatively more moist than other areas of the body, an air-tight dressing often amounts to nothing more than a continuous wet dressing, the moistening agent being the patient's own perspiration!

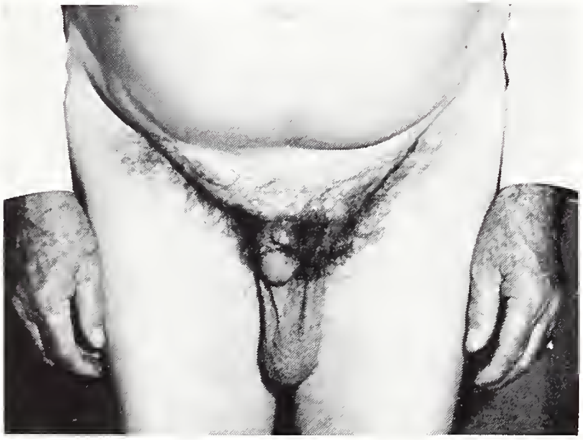

Fig. 6. Postoperative photograph (see fig. 5) following "Y" scrotoplasty.

A Foley catheter should be left in the urinary bladder after operation for huge hernias because the bladder is frequently involved in one or both hernias and its contractility for normal micturition may be somewhat impaired temporarily. Ordinarily, the catheter can be removed in from 24 to 48 hours and the patient will be able to void spontaneously.

Ambulation is commenced early, usually immediately after the catheter has been removed and the anchoring influences of the bedside bottle no longer prevail. Thereafter, the patient increases his activities gradually but steadily and is ready for dismissal from the hospital in the usual time following repair of hernias of conventional size.

SUMMARY AND CONCLUSIONS

A technic of "Y" scrotoplasty concomitant with the repair of huge inguinoscrotal hernias has been presented.

4706 Broadway

BIBLIOGRAPHY

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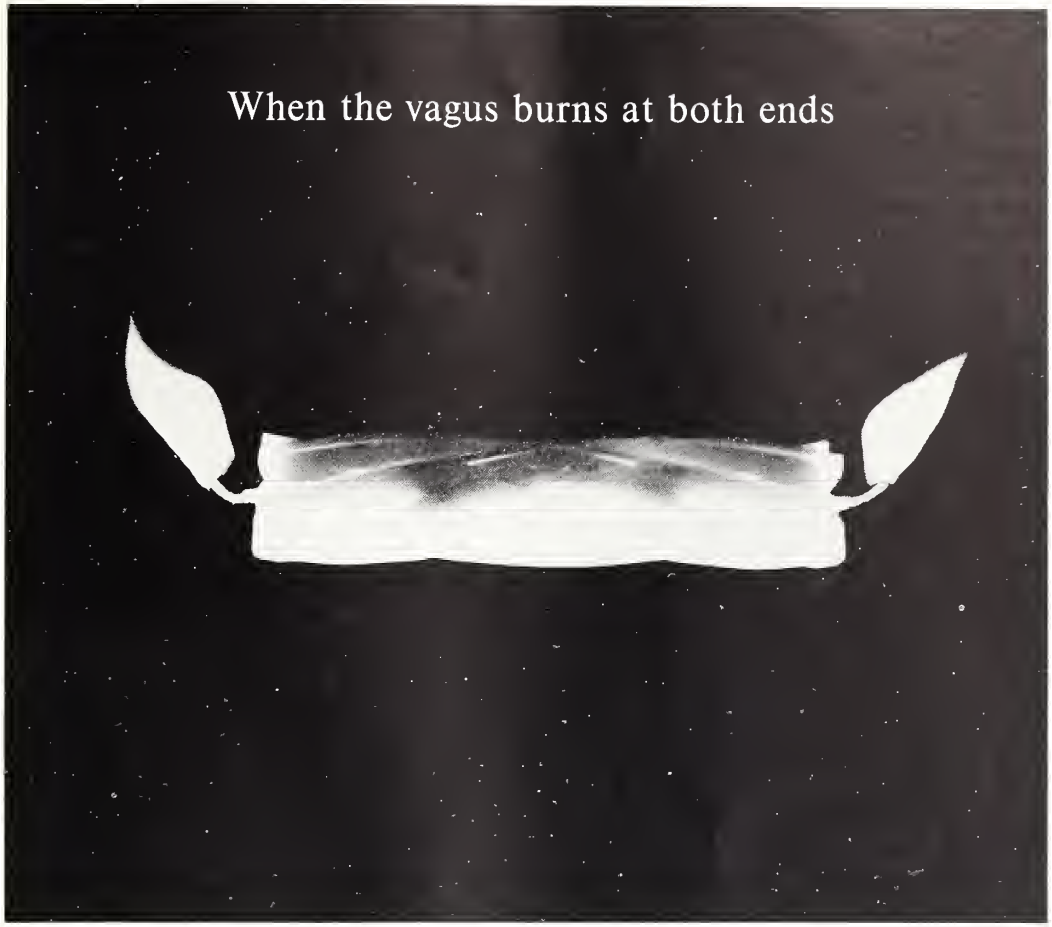

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Special Article

Medical Education in the United States

An exchange of letters between Dr. F. J. L. Blasingame, Executive Vice President of the American Medical Association, and Representative Clark W. Thompson of Texas appeared in the *Congressional Record of the United States,* April 23, 1959. Following is the excerpt from the *Congressional Record:*

Hon. Thompson's Introduction

Mr. Thompson of Texas. Mr. Speaker, I am interested in the medical education situation in the United States, particularly because the University of Texas Medical School is in Galveston, my hometown. With no little concern I have noted in recent months that the medical profession has been under attack in several areas of the press. As a result, I conferred with Dr. John Truslow, director of the Texas University Medical School, and then prepared seven questions dealing with medical education throughout the country, with a view to ascertaining whether sufficient qualified doctors are being produced to meet the needs of our rapidly growing population. I submitted these questions to Dr. F. J. L. Blasingame, of Wharton, Tex., an old friend and constituent of mine who went to Chicago a year ago to assume the responsibilities as executive vice president of the American Medical Association. I have complete confidence in Dr. Blasingame and his answers to the questions I submitted are very gratifying to me.

I was pleased to learn that since World War II there has been an increase in approved medical schools; that there is a substantial increase in medical students; and that, contrary to certain reports, the American Medical Association exercises no control over the number of students admitted to medical schools. There is much other valuable information in Dr. Blasingame's reply and I believe it will do much to eliminate certain misconceptions about the medical profession. Under leave previously granted, I insert my letter to Dr. Blasingame and his reply.

Hon. Thompson's Letter

Dear Dr. Blasingame: My attention has been called to a number of bills introduced in the 86th Congress affecting directly, or indirectly, the medical profession.

As a result, I wish to obtain certain information on the present supply of doctors in the United States and to ascertain as far as possible the prospects for an adequate supply of physicians to meet the needs of our growing population.

So I am calling on you, not only as Executive Vice President of the American Medical Association, but as my old friend and my loyal constituent to supply me with the information. On a separate sheet, I am submitting questions that occur to me in this connection. I know you can provide the facts; facts that should be made known to Congress before action is taken to consider legislation affecting the medical profession.

I am writing this after a conference with our mutual friend, Dr. John Truslow, head of the University of Texas medical branch in Galveston, who called on me today.

I will appreciate your answering these questions and will further appreciate any other information you might give me that is relevant.

I want to say that I think you did a courageous thing in sacrificing your substantial private practice in Wharton to take over the direction of the A.M.A. I wish you great success.

Dr. Truslow joins me in sending you our best wishes.

Sincerely yours,

Clark W. Thompson

Dr. Blasingame's Answer

Dear Congressman Thompson: Thank you for your recent letter and your interest in medical education.

It is indeed a pleasure to bring you an up-to-date report on the status of medical education in the United States. As you know, I am proud of the accomplishments of our medical schools and have great faith in their ability to train enough physicians to meet the needs of our growing population.

You asked seven important questions about the medical education picture. Let me answer them one by one.

First, has the number of physicians graduated from approved medical schools kept pace with the growth of the nation's population? Over the long haul, the increase in medical graduates is much greater proportionately than is the increase in the population. From 1920 to 1958, the percentage of increase in medical graduates from approved schools was 125 per cent, compared with a 64 per cent increase in population. In the past 20 years, the percentage figures are fairly comparable: 32.1 per cent increase for medical graduates; 33.4 per cent increase for population.

The future, I believe, looks bright. Each year, for the past 11 years, the number of students enrolled in approved medical schools has increased. This boost in enrollment amounts to 29.6 per cent (from 22,739 to 29,473).

Your second question was whether medical schools seek to restrict the number of medical stu-

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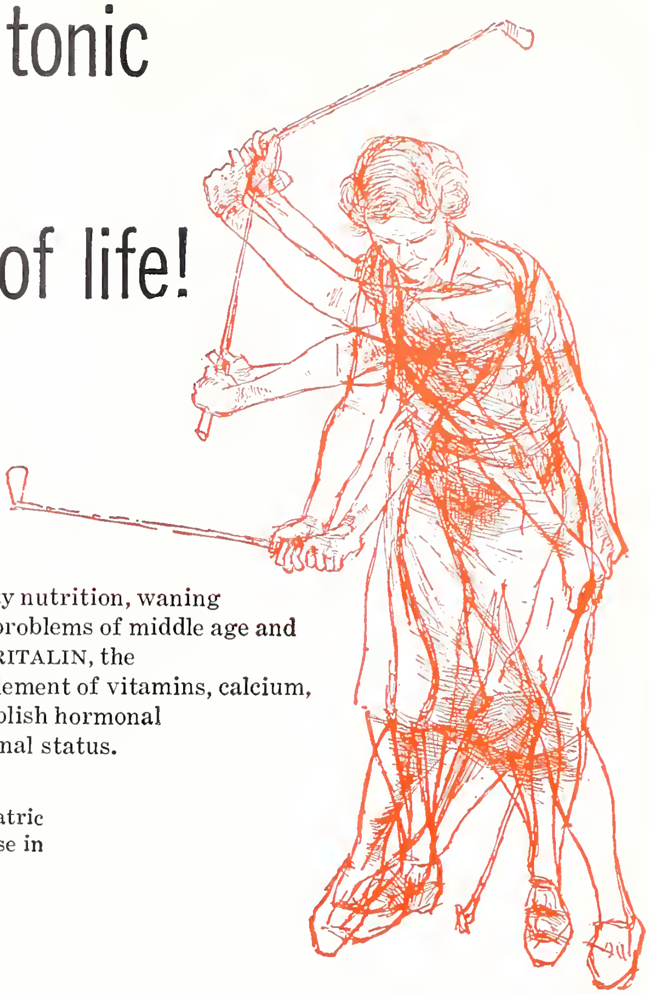

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References: 1. Natenshon, A. L.: J. Am. Geriatrics Soc. *6*: 534 (July) 1958.
2. Bachrach, S.: To be published.
RITALIN® hydrochloride (methylphenidate hydrochloride CIBA)

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dents. Two factors make it necessary for a school to establish an arbitrary top enrollment figure: facilities and budgetary funds available to operate the school. Each school faculty determines the number of students who can have a sound education with the faculty personnel and the facilities available to the school.

Medical education is a graduate educational experience following the completion of the regular college course, and because of the subject matter covered requires individual and small group instruction. To turn out well-trained, highly-qualified physicians the school requires a large faculty of skilled educators, plus sufficient teaching and research laboratories, hospital beds and clinical patients. The number of students that can be taught must be necessarily restricted to fit the facilities so that the emphasis can be on quality of the graduate rather than on the quantity of students.

Third, you asked: What is the ratio between applicants to medical schools and those accepted? The answer is 1.97 (15,791 applicants for first year medical school to 8,030 places available). This ratio has remained about the same for the past five years.

Incidentally, a common confusion that arises in discussing applicants to student ratio is mistaking applications for people (applicants). Each person applies, on the average, to four medical schools. Thus, for the 1957-1958 academic year, the 15,791 applicants filed a total of 60,946 applications.

Next, you asked if it is true that only students with an A college academic record are accepted into medical school. That has never been true. About one sixth of the entering medical students for the whole country have A college records; about two thirds have B records and about one sixth have C records.

Your fifth question was: Is the number of medical schools increasing in the United States? In 1944, there were 77 approved medical schools, including eight two-year schools from which students had to complete their final two years of medical education in any of the 69 four-year schools. In 1958, there were 85 approved medical schools. Eighty-one are four-year schools; only four two-year schools.

Two other schools are under development. As a step toward still further expansion of medical school facilities, the American Medical Association last year urged "institutions of higher education where medical education has not been undertaken in the past to give serious consideration to the development of opportunities in the field."

Sixth. Has the American Medical Association anything to do with the number of enrollments in medical schools? Enrollments are strictly determined by each individual medical school. Neither the universities nor their medical schools would permit an intrusion into their academic freedom by a national professional association.

Your final question asked whether I think it is necessary for federal funds to be provided for medical schools. The medical profession welcomes one-time federal grants for medical school construction and renovation as well as federal grants for basic research. The profession has been opposed to continuing federal aid for operating expenses because of the potentialities therein for federal control.

I should like to point out that the National Fund for Medical Education, which raises funds from industrial sources, and the American Medical Education Foundation, which raises funds from the medical profession, have made grants in excess of $10 million to medical education over the past eight years.

I hope this information will aid you in analyzing bills introduced in the 86th Congress which pertain to the training of physicians. As further background, I am sending along a copy of the most recent annual report prepared by our council on medical education and hospitals, which was published in the *Journal of the American Association,* November 15, 1958. It provides additional data that you might find useful.

I am happy that you wrote me after conferring with our mutual friend, Dr. John Truslow. If I can provide any additional information, please make your wishes known.

Sincerely yours,

F. J. L. Blasingame, M.D.

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President's Page

Doctors are showing an increasing interest in citizenship. This gratifying statement was made by Representative Thomas B. Curtis when he spent a few minutes with the Council at its September meeting. He said that more and more doctors are interesting themselves in broad legislation and that nothing could do more to dispel the feeling held by many that doctors are narrow in their interests and take no part in community or national affairs unless it relates directly to them or their practice.

Ralph Perry, M.D.

He said that the work of physicians and organized medicine had brought forth the criticism that doctors were organizing for political action—which again is gratifying. He urged that doctors and others become interested in political organizations at the grass roots level and join the party of their choice. Many people claim to be "independents" when it comes to politics rather than party members. They should be party members first and then exercise their independent judgment later.

And certainly the action of the American Medical Association, the state medical associations and individual physicians in writing and contacting members of Congress resulted in the decision of the House Ways and Means Committee to take no action on the Forand bill until 1960. At another meeting, Mr. Curtis stated that doctors had been taken to task by organized labor for opposing passage of the Forand bill at hearings before the House Ways and Means Committee last summer. He defended the action taken by physicians and stated that all groups affected by legislation should be encouraged to state their viewpoint in order that the public interest may be served.

Ralph Perry

EDITORIALS

A.M.A. Dallas Meeting

The American Medical Association's thirteenth clinical meeting, December 1 to 4, to be held in Dallas, Texas, is expected to draw about 3,500 physicians, mainly from the southern and southwestern states. Planned in cooperation with Dallas physicians, the meeting is designed to aid the family physician meet his daily practice problems.

Everett C. Fox, M.D., Dallas, is general chairman of the meeting, and C. D. Bussey, M.D., Dallas, is program chairman.

Among subjects to be discussed on the scientific program are soft tissue injury, whiplash injuries of the neck, diabetes, heart murmurs in children, new laboratory procedures, new resuscitation technics, premarital and marital counseling and the problem child.

Hubertus Strughold, M.D., professor of space medicine at the School of Aviation Medicine, Randolph Air Force Base, Texas, will be principal speaker at the opening scientific session on December 1. He will discuss the role of medicine in the space age.

The winner of the A.M.A.'s Distinguished Service Award at the Atlantic City meeting, Dr. Michael E. DeBakey, will participate in a symposium on the surgical consideration of cerebrovascular insufficiency on Tuesday afternoon, December 1. Dr. DeBakey, chairman of the department of surgery at Baylor University College of Medicine, Houston, was given the award for his outstanding contributions to medicine in the field of vascular surgery.

The scientific program, including lectures, symposiums, medical motion pictures, color television and approximately a hundred scientific exhibits, will be held in Dallas Memorial Auditorium. Technical exhibits will number 251.

The auditorium also will house the "world's largest health fair," sponsored by the Dallas County Medical Society in conjunction with the A.M.A. The fair will run from November 27 to December 7 and will be open to the public.

The fair will feature 150 educational exhibits, prepared by the A.M.A., allied health groups and voluntary health organizations. They will be manned by members of the Dallas society.

Another special feature of the A.M.A. meeting will be a national conference on the medical aspects of sports, to be held Monday, November 30, the day before the A.M.A. meeting opens.

The conference, to be held under the auspices of the A.M.A.'s Committee on Medical Aspects of Sports (formerly the Committee on Injury in Sports) will be open to athletic directors, coaches and trainers, as well as interested physicians.

The program will cover the general areas of the physiology and pharmacology of exercise, the training and conditioning of the athlete, and the prevention and treatment of injuries.

This is the second time the A.M.A. has met in Dallas. It held an annual meeting there in 1926. One A.M.A. President has come from Dallas, the late Dr. Edward H. Cary, who was inaugurated in 1932 at the New Orleans meeting.

The A.M.A. House of Delegates, numbering 208, among these four from Missouri, will meet throughout the week at the Adolphus Hotel, meeting headquarters. The first act of the House will be to name the General Practitioner of the Year. The late Dr. Lonnie Coffin, Farmington, Iowa, was the last recipient of the award, given annually to an outstanding American doctor for his medical and civic contributions to his community. The first recipient of the award was Dr. Archer Chester Sudan, Kremmling, Colo., who received the award at the first clinical meeting in January 1948 at Cleveland.

The clinical sessions have been held in Cleveland, St. Louis, Washington, Los Angeles, Denver, Miami, Boston, Seattle, Philadelphia and Minneapolis. Physician attendance has ranged from 1,896 at the first Cleveland meeting to 4,427 at the Boston meeting.

Age and Employment

While most industrial companies agree that there is no difference between older and younger employees in absenteeism, turnover, productivity and reliability, a recent survey shows that industry does not follow its belief in this line.

The National Office Management Association made surveys in Minneapolis-St. Paul, New York City, Houston and San Francisco.

In Minneapolis only 15 per cent of 109 companies have no age limit. Most companies had an age limit of 50 but some went as low as 30 for men and 25 for women.

In New York, 42 per cent of 148 companies are closed to men at 50 years of age and almost 68 per cent of firms will not hire a man 55 years old. Nine per cent of companies will not hire women 35 years of age and 30 per cent will not hire a woman of 45.

Age 50 was the maximum for 25 per cent of 56 companies in San Francisco. There were 16 per cent who would not hire a man over 40, and 31 per cent will not employ a woman over 50.

In Houston, 29 per cent of 41 companies have closed job openings to men over 45 and another 19.5 per cent prefer their new employees to be under 40. Women over 50 will not be hired by 27 per cent.

While age limits were given by many companies, when they were asked to list factors in judging job applicants in degree of importance, age was considered least important by eight out of every 10.

Musings of the Field Secretary

A conference of coaches and physicians on "Athletic Injuries" was held at the St. Louis Medical Society headquarters Tuesday evening, September 15. This mutually beneficial session was sponsored by the St. Louis Medical Society in cooperation with St. Louis Public High Schools, St. Louis Archdiocesan High Schools and St. Louis Lutheran High Schools.

The evening discussions centered upon the prevention and treatment of athletic injuries which happen regularly, and too often. The program began with a short social hour followed by dinner. The dinner speaker was Mr. Robert Bauman, trainer for the St. Louis Cardinals. He spoke on "The Health Practices of a Baseball Trainer." His talk was made particularly interesting through the use of illustrations of injury prevention and treatment relating to many well known baseball stars.

A demonstration of ankle taping was given.

The St. Louis Cardinal trainer, Mr. Bauman, spoke at the dinner meeting.

Following the dinner session a more comprehensive program was presented in the Society Auditorium. This consisted of discussions as follow: Donald O. Burst, M.D., "Orthopedic Phases of Athletic Injuries and What to Do During the 'Golden Hour' "; Newell W. Schlueter, M.D., "Skin Problems and Their Care"; George L. Hawkins, Jr., M.D., "Signs and Symptoms of Severe Nerve Injuries"; I. C. Middleman, M.D., St. Louis Cardinals' physician, "Problems in the Management of a Baseball Health Program"; "Demonstration of Taping" by Mr. Fred Wappel, Missouri University Tigers trainer and Mr. Bruce Melin, Washington University Bears trainer; Mr. Louis Kittlaus, Director of Physical Education, St. Louis Schools, "The Importance of Conditioning in the Prevention of Injuries."

Some 200 people including athletic coaches, trainers and physicians of the area were in attendance. Overheard were numerous complimentary comments on the session from those present. Hopes were expressed that a similar, though more extensive program, be presented next year. Here is a project which would seem to be a most worthwhile consideration for all areas of the state with the initiative to be assumed by local medical societies.

POLITICS

It is unfortunate that the word "politics" in the minds of too many people connotes something "dirty," "distasteful," "fixed," or "crooked." It is quite probable that such can be changed through a better understanding on the part of many of the real meaning of the word "politics" as fundamentally applied to our form of government. To get the true meaning of this word and its implications for the welfare of this country and all of its citizens, the U. S. Chamber of Commerce and its state affiliates are sponsoring "Citizenship Responsibility Conferences" and "An Action Course in Practical Politics." The latter project consists of a series of nine two-hour workshops held weekly (or every two weeks) attended by 12 to 20 participants and conducted by a discussion leader. Each workshop deals with one important aspect of practical politics. There is a set of eight pamphlets to aid the

Greene County Medical Society members participate in the course on practical politics.

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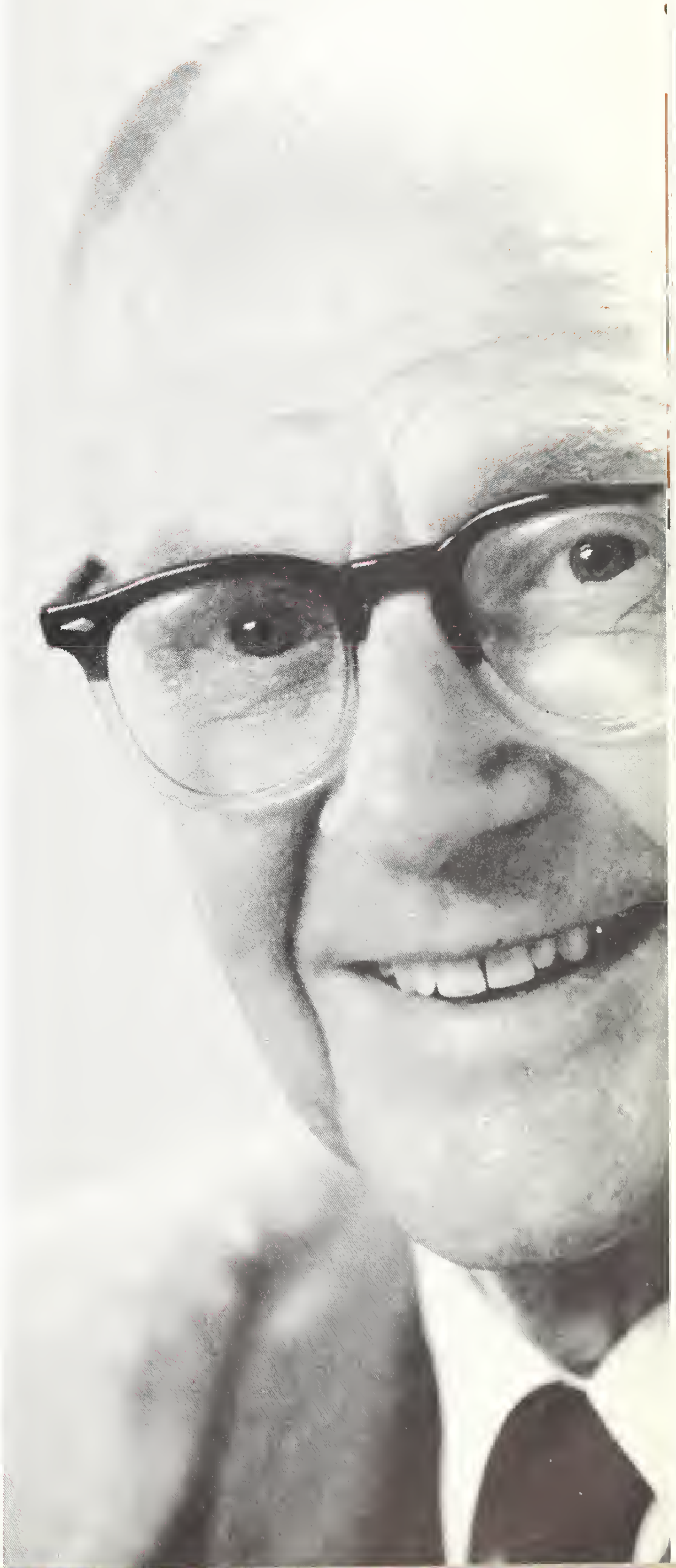


course—one pamphlet for each of eight workshops. The ninth workshop is set up to have local politicians appear and discuss practical politics. The first eight workshops have the following topics, covered in the pamphlets, for discussion:

1. The Individual in Politics
2. Political Party Organization
3. The Political Precinct
4. The Political Campaign
5. Political Clubs
6. The Political Leader's Problems
7. Political Meetings
8. Business Men in Politics

The discussion leader for the course has a leader's manual which explains how to organize and operate the workshops to make them the most productive. The manual was developed with the help of training experts and contains a complete blueprint of the course—including instructions on how each workshop should operate.

The Greene County Medical Society group taking the course numbers 24. They meet at 7:00 a.m. on Thursday mornings for breakfast and their discussions. Dr. Ned White serves as the discussion leader. Each doctor purchased a set of the eight pamphlets for a nominal charge to study for each discussion period.

It has been my privilege to attend one of their sessions and to enjoy observing the enthusiasm and interest shown by the entire group in discussing the particular topic of lesson 3. Dr. Durward Hall, a member of the Greene County Medical Society, is Chairman of the Citizenship Responsibility Council of the Missouri State Chamber of Commerce which is vigorously promoting these courses on practical politics over the entire State of Missouri.

Missouri Medical Meetings

Missouri State Medical Association, St. Louis, March 13, 14, 15, 16, 1960.

Missouri Academy of General Practice, 10th Annual Assembly, Chase Hotel, St. Louis, Nov. 7-8, 1959.

St. Louis Pediatric Society—second Thursday of each month, September through May at Medart's Restaurant, 8:00 p.m.

Component Society Meeting Dates

Audrain County Medical Society—third Monday of each month.

Barton-Dade County Medical Society—third Wednesday of each month.

Benton County Medical Society—meets only on call.

Boone County Medical Society—first Tuesday of each month.

Buchanan County Medical Society—first Wednesday of each month.

Butler-Ripley-Wayne County Medical Society—first Wednesday of each month.

Callaway County Medical Society—third Thursday of each month.

Cape Girardeau County Medical Society—first Monday of each month.

Chariton-Macon-Monroe-Randolph County Medical Society—second Thursday of each month September through May.

Clay County Medical Society—last Tuesday of each month.

Clinton County Medical Society—meets only on call.

Cole County Medical Society—fourth Tuesday of each month.

Cooper County Medical Society—first Monday after the 15th of each month.

Dallas-Hickory-Polk County Medical Society—first Wednesday of each month.

Dunklin County Medical Society—third Tuesday of each month.

Franklin-Gasconade-Warren County Medical Society—last Tuesday of each month at the St. Francis Hospital, Washington, at 12:30 p.m.

Grand River Medical Society (Caldwell-Carroll-Livingston, Grundy-Daviess, Harrison, Linn, Mercer, DeKalb)—second Thursday of each month.

Greene County Medical Society—fourth Friday of each month.

Henry County Medical Society—meets only on call.

Holt County Medical Society—meets only on call.

Howard County Medical Society—meets only on call.

Jackson County Medical Society—March, May, October and December.

Jasper County Medical Society—second Tuesday of each month, September through May.

Jefferson County Medical Society—meets third Friday of each month.

Johnson County Medical Society—meets only on call.

Lafayette-Ray County Medical Society—second Tuesday of each month at 7:30 p.m., at the Victory Cafe, Lexington.

Lewis-Clark-Scotland County Medical Society—meets only on call.

Lincoln-St. Charles County Medical Society—third Thursday of each month.

Marion-Ralls-Shelby County Medical Society—fourth Tuesday of each month. 7:30 p.m.

Mid-Missouri County Medical Society (Phelps-Crawford-Dent-Pulaski-Maries-Laclede)—fourth Thursday of each month.

Miller County Medical Society—meets only on call.

Mineral Area County Medical Society (St. Francois-Iron-Madison-Washington-Reynolds-Ste. Genevieve)—fourth Thursday of each month.

Moniteau County Medical Society—second Thursday of each month.

Nodaway-Atchison-Gentry-Worth County Medical Society—first Monday in February, April, October and December.

North Central Counties Medical Society (Adair-Schuyler-Knox-Sullivan-Putnam)—meets only on call.

Ozarks Medical Society (Barry-Lawrence-Stone-Christian-Taney-Newton-McDonald)—second Tuesday of each month September through June.

Pemiscot County Medical Society—third Thursday of each month.

Perry County Medical Society—second Thursday of each month.

Pettis County Medical Society—third Monday each month September through May.

Pike County Medical Society—third Tuesday of each month.

Platte County Medical Society—meets only on call.

St. Louis County Medical Society—second and fourth Wednesday of each month.

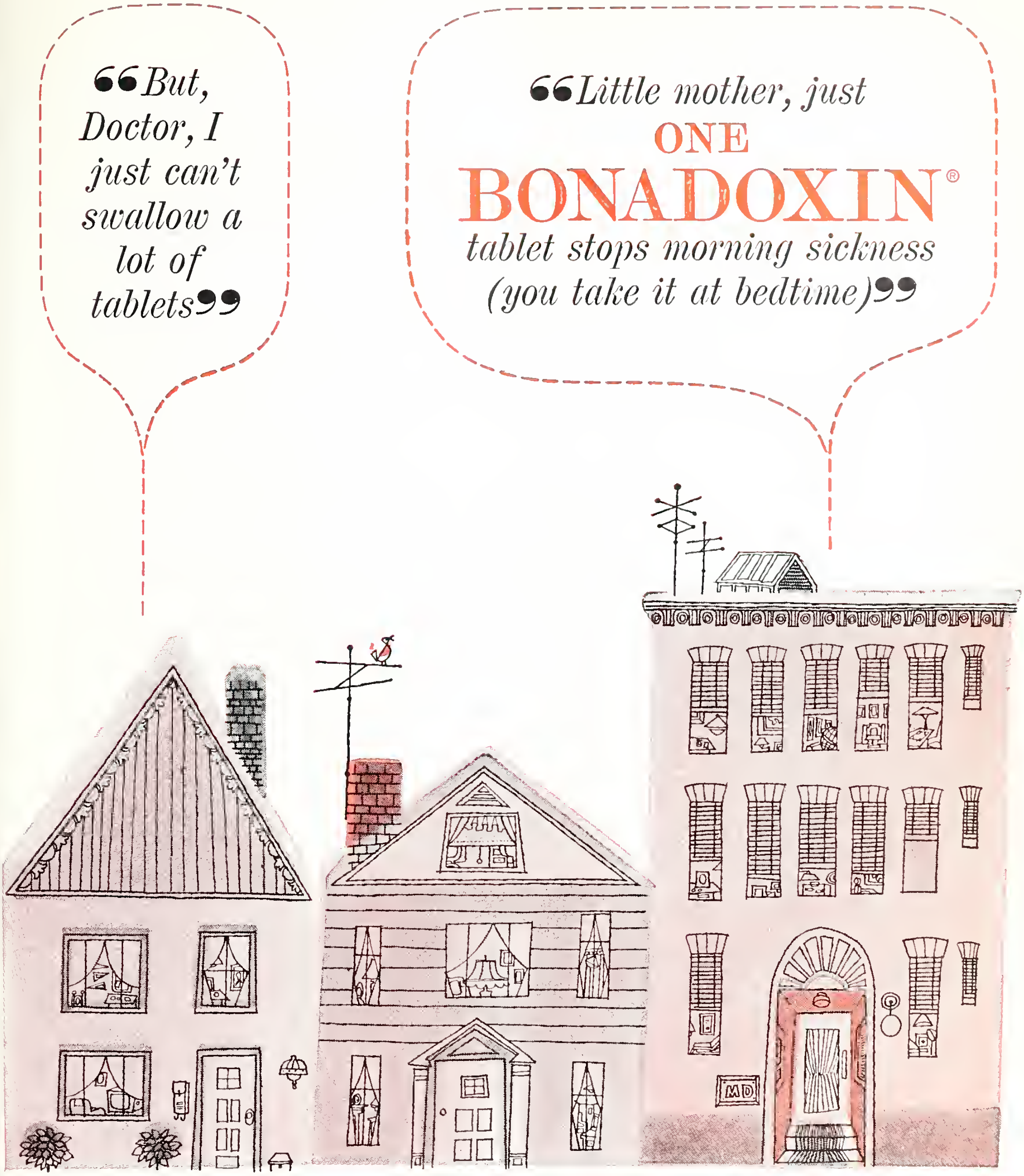
St. Louis Medical Society—third Tuesday of each month October through May.

Semo County Medical Society (Stoddard, New Madrid, Mississippi, Scott)—third Wednesday of each month September through May.

South Central Counties Medical Society (Howell-Oregon-Texas-Wright-Douglas-Ozark)—fourth Wednesday of each month.

Webster County Medical Society—meets only on call.

West Central Missouri Society (Bates-Cass-St. Clair-Vernon-Cedar)—second Thursday of each month.


❝But, Doctor, I just can't swallow a lot of tablets❞
❝Little mother, just ONE BONADOXIN® tablet stops morning sickness (you take it at bedtime)❞
MD

The formula tells why BONADOXIN quickly stops nausea and vomiting of pregnancy in 9 out of 10 cases.* Each tiny BONADOXIN tablet contains: Meclizine HCl (25 mg.) for antinauseant action / Pyridoxine HCl (50 mg.) for metabolic replacement

More than 60,000,000 tablets prescribed and taken. Toxicity low, tolerance excellent. In bottles of 25 and 100. Usual dose: one tablet at bedtime; severe cases may require another on arising. See PDR, p. 779.

BONADOXIN also effectively relieves nausea and vomiting associated with: anesthesia, radiation sickness, Meniere's syndrome, labyrinthitis, cerebral arteriosclerosis and motion sickness.

After Baby Comes

For infant colic, try antispasmodic BONADOXIN Drops... stop colic in 7 out of 8 cases.*

Each cc. contains:
Meclizine 8.33 mg. / Pyridoxine 16.67 mg.

See PDR, p. 779.

*Bibliography available on request.

ROERIG *New York 17, New York • Division, Chas. Pfizer & Co., Inc. • Science for the World's Well-Being*

News—Personal and Professional

S. C. Slaughter, M.D., Fredericktown, has been named a Knight of St. Gregory by Pope John XXIII.

The Lions Club of Jefferson City heard a discussion of cancer research developments by **E. D. Sugarbaker**, M.D., Jefferson City, at a fall meeting.

The retirement of **George A. Johns**, M.D., Marshall, as superintendent of the Missouri State School at Marshall has been announced as effective January 1, 1960. **Orr Mullinax**, M.D., St. Joseph, has been named to take the position.

The American Hospital Association has appointed **David Littauer**, M.D., St. Louis, chairman of the committee on care of the chronically ill and of the aged, for a second year. He also has been appointed chairman of the American Hospital Association group of the liaison committee with the American Medical Association and the American Nursing Home Association for another year.

The South Central Business Association of Kansas City was addressed recently on "Your Health Hazards Today" by **Abraham Gelperin**, M.D., Kansas City.

The Business and Professional Women's Club of Sedalia heard talks on "First Aid and Health" by **P. V. Siegel**, M.D., Smithton, and a talk on "Safety on the Highway" by a member of the Highway Patrol.

Among Fellows inducted into the American College of Surgeons at its October session were Drs. **Clifford R. Kaskie**, Clayton; **E. J. Schewe**, Columbia; **Joe E. Hirsch**, **James R. McVay, Jr.**, **Samuel A. Montello** and **Kenneth S. Nicolay**, Kansas City; **Willard M. Allen**, **Harvey R. Bernard**, **Thomas B. Ferguson**, **William J. Gillespie**, **Stanley L. London**, **Joseph A. Roy** and **James M. Stokes**, St. Louis; **Howard J. McAlhany**, **F. Thomas Moseley** and **William W. Wood**, Springfield.

The Silez Planned Progress Council chose **R. M. Penn**, M.D., Silex, as the recipient of their second annual Outstanding Citizen Award.

Recently named on the Madison Memorial Hospital board at Fredericktown was **Charles E. Michaelis**, M.D., Fredericktown.

The medical staff of the Deaconess Hospital, St. Louis, recently named **Guerdan Hardy**, M.D., St. Louis, as president, and **George E. Scheer**, M.D., St. Louis, as president-elect.

Work of the Kansas City Mental Health Foundation was described by **Robert H. Barnes**, M.D., Kansas City, to the auxiliary of the foundation at an organization meeting recently.

The International College of Surgeons has elected **Claude J. Hunt**, M.D., Kansas City, a vice president, and also chairman of the board of trustees.

A bronze plaque naming the William Jewell College athletic field The Luther D. Green Memorial Stadium was unveiled between halves at a football game in September. Dr. Greene, who died earlier this year, had been a principal donor to the building fund.

Carroll P. Hungate, M.D., Kansas City, senior medical officer since 1948 at the Olathe Naval Air Station, retired August 31 from the naval service after more than 30 years of duty.

"Discipline in Preschool Children 3 to 5" was discussed by **Morton Jacobs**, M.D., Kansas City, before a Preschool Group of the Porter School on October 6.

The Missouri Society for Crippled Children had as speaker at a meeting on October 9 in Kansas City **E. H. Trowbridge, Jr.**, M.D., Kansas City. He spoke on "What Does the Future Hold for Epilepsy?"

Recent talks before local units of the American Cancer Society have been **Neill Berry**, M.D., Kansas City; before the Johnson County unit; **Herbert H. Virden**, M.D., Kansas City, at Joplin; **A. McChesney Evans**, M.D., Columbia, at Carrollton; **Terry E. Lilly**, M.D., Kansas City, at St. Charles, and **William D. Bradshaw**, M.D., Clinton, at Neosho.

DISPATCHERS REPORT

Your difficult rheumatic patient...

on the job again

through effective relief and rehabilitati

For the patient who does not require steroids

PABALATE®

Reciprocally acting nonsteroid antirheumatics . . . more effective than salicylate alone.

In each enteric-coated tablet:

Sodium salicylate U.S.P.	0.3 Gm. (5 gr.)
Sodium para-aminobenzoate	0.3 Gm. (5 gr.)
Ascorbic acid	50.0 mg.

or for the patient who should avoid sodium

PABALATE® - Sodium Free

Pabalate, with sodium salts replaced by potassium salts.

In each enteric-coated tablet:

Potassium salicylate	0.3 Gm. (5 gr.)
Potassium para-aminobenzoate	0.3 Gm. (5 gr.)
Ascorbic acid	50.0 mg.

For the patient who requires steroids

PABALATE®-HC

(PABALATE WITH HYDROCORTISONE)

Comprehensive synergistic combination of steroid and nonsteroid antirheumatics... full hormone effects on low hormone dosage . . . satisfactory remission of rheumatic symptoms in 85% of patients tested.

In each enteric-coated tablet:

Hydrocortisone (alcohol)	2.5 mg.
Potassium salicylate	0.3 Gm.
Potassium para-aminobenzoate	0.3 Gm.
Ascorbic acid	50.0 mg.

PABALATE® Robins PABALATE®-HC

For steroid or non-steroid therapy: SAFE DEPENDABLE ECONOMICAL

A. H. ROBINS CO., INC., RICHMOND 20, VIRGINIA • Ethical Pharmaceuticals of Merit since 1878

Councilor District News

FIRST COUNCILOR DISTRICT

DONALD M. DOWELL, CHILLICOTHE, COUNCILOR

Buchanan County Medical Society

Dr. Herbert C. Senne, St. Joseph, addressed the first fall meeting of the Buchanan County Medical Society, September 2 in the Empire Room of Hotel Robidoux. He presented a paper on "Hypoglycemic Drugs." Forty members attended the dinner and meeting.

Dr. Senne is a member of a nationwide team that is studying and reporting their findings in the use of hypoglycemic drugs. He discussed the uses of the newer oral hypoglycemic drugs as well as the newer aspects and mechanisms of the action of insulin.

The speaker was presented by Dr. Paul M. Beck, program chairman. Dr. George W. Forman, Society President, presided.

William B. Rost, M.D., *Secretary*

Grand River Medical Society

The Grand River Medical Society met September 10 at the Strand Hotel in Chillicothe. Following the social hour dinner was served. About 50 were present, including 27 members, 20 Auxiliary members, visitors and pharmaceutical representatives. The visitors and guests were introduced. Mrs. Stanley S. Peterson, Springfield, President of the Woman's Auxiliary, addressed the Auxiliary at their meeting.

The scientific program was presented by Dr. Mark Dodge, internist, and Dr. C. Y. Thomas, surgeon, of Kansas City. They discussed "Problems in Fluid Balance." This was a fine presentation followed by questions and answers.

The minutes of the last meeting were read and approved. There being no further business the meeting was adjourned.

E. A. Duffy, M.D., *Secretary*

SECOND COUNCILOR DISTRICT

J. J. WIMP, KIRKSVILLE, COUNCILOR

Chariton-Macon-Monroe-Randolph County Medical Society

The September meeting of the Chariton-Macon-Monroe-Randolph County Medical Society was held at the Woodland Hospital in Moberly on Thursday night, September 10.

Following dinner members of the Society and guests were privileged to hear a most interesting and informative discussion on "Murder, Mayhem and Mystery" by James P. Wyatt, M.D., Professor of Pathology at St. Louis University Medical School.

Dr. Wyatt said that the instruments of violent death have been the same throughout the centuries. He showed slides of many cases of violent deaths which have occurred in the St. Louis area and many of these just recently.

He emphasized that the medico-legal autopsy, not only in homicidal investigation but in other forensic avenues, must be thorough, must demand a range of awareness and have precise attention to detail and completeness. He stated that there is no truth in the old aphorism that "dead men tell no tales"; they often speak with eloquence.

Members present were Drs. Josephine Baker, W. D. Chute, C. C. Cohrs, J. W. Fleming, R. M. Hasson, L. E. Huber, A. P. Rowlett, C. C. Smith, S. R. Szymanski, Moberly; G. C. Rice and D. D. Stuart, Brunswick; C. C. Weger, Keytesville; J. E. Campbell, Gretchen Collins, D. E. Eggleston and H. S. Miller, Macon; F. A. Barnett, Paris; P. V. Dreyer, Huntsville; and F. L. Harms and G. W. Hawkins, Salisbury.

Guests were Dr. Carlos Ruiz, resident physician at Wabash Hospital, and James Harms of Salisbury.

At the business session Carl Rinker, M.D., Macon, was voted into membership in the society.

Josephine Baker, M.D., *Secretary*

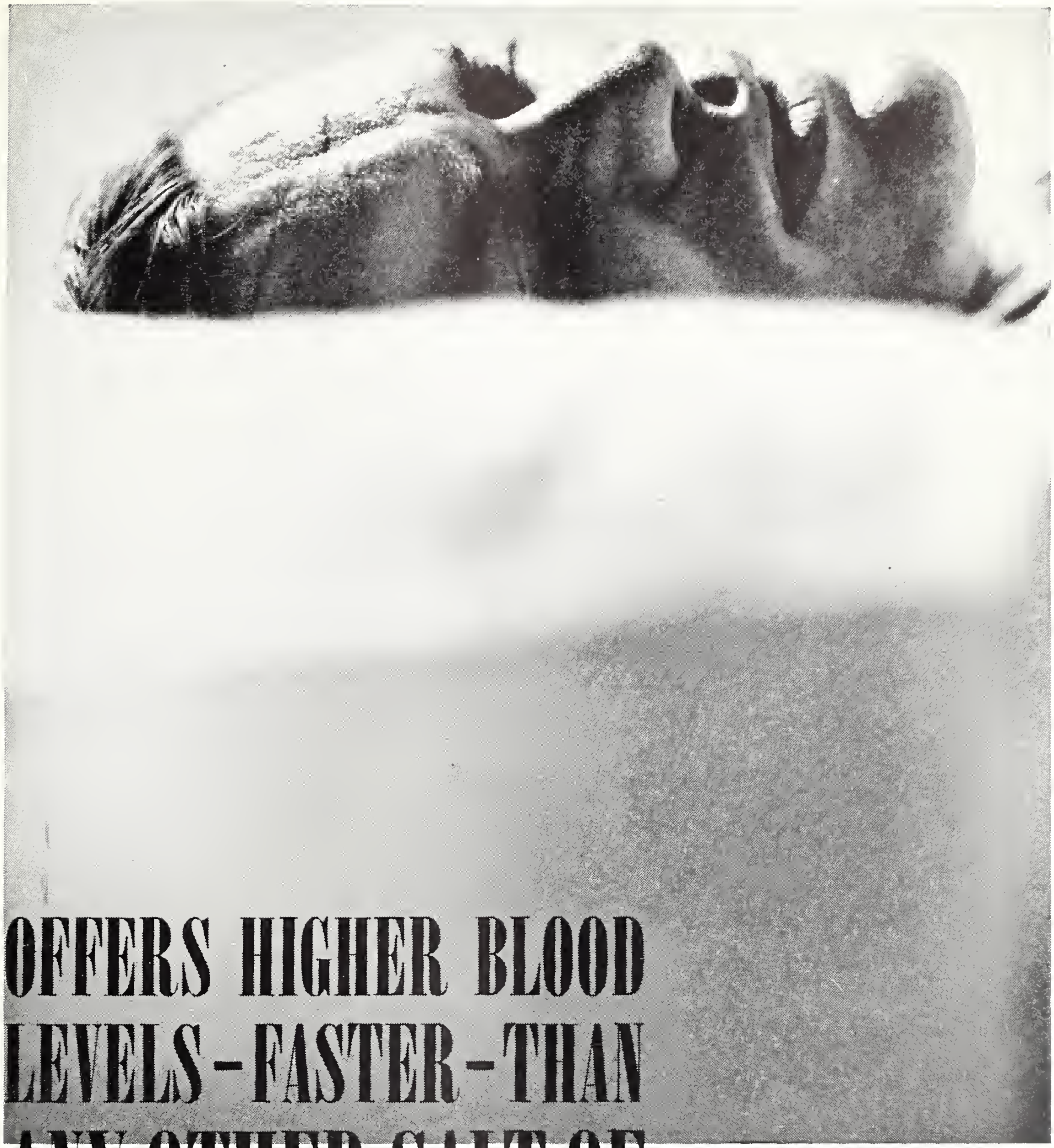
FOURTH COUNCILOR DISTRICT

PAUL R. WHITENER, ST. LOUIS, COUNCILOR

Jefferson County Medical Society

On Tuesday evening, August 25, the Jefferson County Medical Society held its fourth annual joint session with the High School Athletic Coaches of Jefferson County. The speaker, who did a wonderful job, was Dr. Arthur H. Stein of the Orthopedic Department of Washington University and Barnes Hospital. He covered the entire field of athletic injuries but stressed the ligamentous injuries of (1) ankle, (2) knee and (3) acromio-clavicular junction. He stressed the importance of having every injured athlete taken to the dressing room for evaluation before resuming his athletic activity. He strongly condemned the "win at all costs" attitude of some coaches. The fourteen coaches present appeared to enjoy and be quite impressed with Dr. Stein's philosophy in handling athletic injuries even though all may not have agreed with him. The meeting closed with the usual hour of fellowship and refreshments.

The following doctors were present: Drs. Allbee,



OFFERS HIGHER BLOOD LEVELS – FASTER – THAN ANY OTHER SALT OF ORAL PENICILLIN:

COMPOCILLIN®-VK

Potassium Penicillin V

® FILMTAB — FILM-SEALED TABLETS, ABBOTT, U.S. PAT. NO. 2881085

in tiny, easy-to-swallow Filmtabs® in tasty, cherry-flavored Oral Solution

Supplied: Compocillin-VK Filmtabs, 125 mg. (200,000 units), bottles of 50 and 100; 250 mg. (400,000 units), bottles of 25 and 100. Compocillin-VK Granules for Oral Solution come in 40-cc. and 80-cc. bottles. When reconstituted, each 5-cc. teaspoonful represents 125 mg. (200,000 units) of potassium penicillin V.

ABBOTT

908129

R. H. Donnell, T. A. Donnell, Fallet, Mayfield, McKinstry, Rice, Rutledge, Senn and Yoskit.

Meeting of September 22

The Jefferson County Medical Society held its regular monthly meeting at the Jefferson Memorial Hospital on Tuesday night, September 22. Mrs. Edna Price of the Jefferson County Social Welfare Office gave a brief discussion of the new Missouri State Indigent Care Program.

Mr. Roy Bastian of the Blue Cross gave a brief statistical review of the operation of the Blue Cross with specific reference to experiences in Jefferson County.

Doctors present were: Drs. Bolgar, Allbee, Fallet, Mayfield, McKinstry, Kozal, Rutledge, our District Councilor, Dr. Paul Whitener, and a guest from St. Louis and former secretary of St. Louis Medical Society, Dr. George Hawkins.

John F. Rutledge, M.D., *Secretary*

Lincoln-St. Charles County Medical Society

A dinner meeting of the Lincoln-St. Charles County Medical Society was held at the Southern Air in Wentzville on Tuesday night, September 29. The evening festivities included a social hour, dinner and an interesting program given by Victor Jones, M.D., radiologist, of St. Charles.

Dr. Jones discussed, "Some Important Uses of Radioactive Isotopes."

Paul Rother, M.D., *Secretary*

SIXTH COUNCILOR DISTRICT

O. B. BARGER, HARRISONVILLE, COUNCILOR

Henry, Johnson, Pettis, Saline, Lafayette-Ray County Medical Societies

A joint dinner meeting of the physicians and their wives of the Henry, Johnson, Pettis, Saline, Lafayette-Ray and adjacent county medical societies was held at the Country Club in Clinton, on Wednesday night, September 16. The evening festivities began with a social hour followed by an excellent buffet dinner and then the scientific program.

Dr. R. O. Muether, St. Louis, Associate Professor of Internal Medicine at St. Louis University Medical School and President-Elect of the Missouri State Medical Association, presented a scientific paper on "Enzymes in the Diagnosis of Liver Disease."

A special program was arranged for the doctors' wives. Mrs. John Balke of Clinton took the ladies, following the dinner, to her home where she showed them her splendid collection of antiques and discussed the various items.

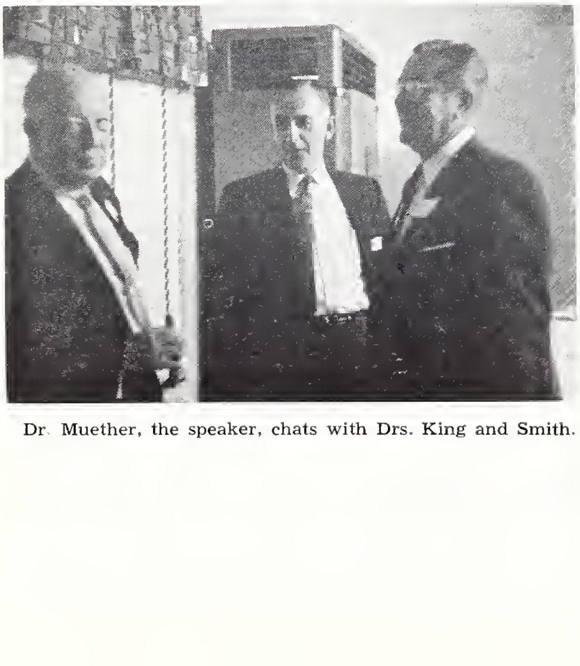
The audience was attentive.

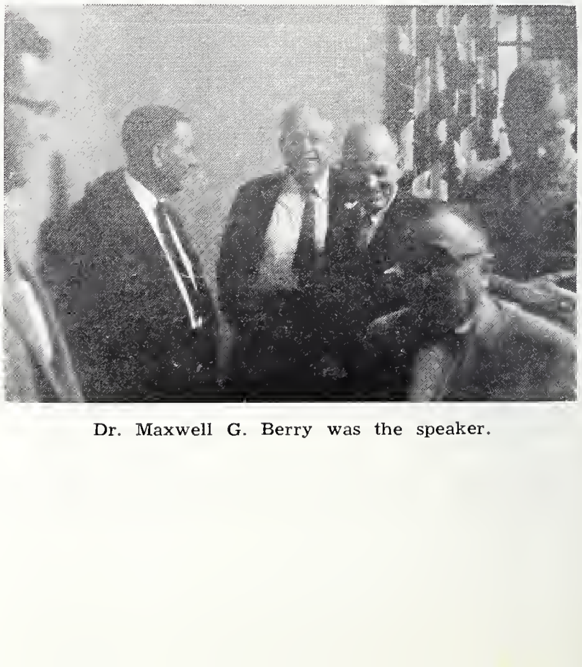
More than 100 people attended this joint dinner meeting and many fine comments were heard at the conclusion of the session concerning both the scientific program as well as the special offering for the ladies.

Ray Hollingsworth, M.D., *Program Chairman*

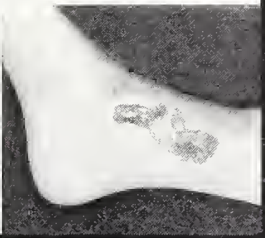
West Central Missouri Medical Society

Maxwell G. Berry, M.D., internist of Kansas City, spoke at the dinner meeting of the West

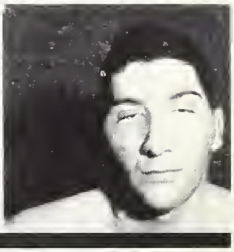

Dr. Muether, the speaker, chats with Drs. King and Smith.


Dr. Maxwell G. Berry was the speaker.

FORCE INJURY
severe bruises
. . . swelling
. . . cleared
by fifth day[2]



VARICOSE
ULCER
15 years duration
. . . resolved with
VARIDASE[1]



INFLAMMATORY
DERMATOSIS
rapidly spreading
rhus dermatitis
healed within
a week[1]

INFECTED
LACERATION
marked reversal
in 3 days . . .
returned
to school . . .
osure advanced[1]

THROMBOPHLEBITIS
back on his feet
in a week after
recurrent episode[1]

REFRACTORY
CELLULITIS
normal routine
resumed after 4 days
of VARIDASE[1]

Central Missouri Medical Society and the doctors' wives at Harrisonville, on Thursday night, September 10.

Dr. Berry discussed the subject, "Facts and Fancies About Atherosclerosis." This was both an interesting and provocative presentation.

Slides were used with the talk.

Some 25 doctors and their wives attended.

The evening festivities began with a social hour, dinner, a short business session, and then the scientific program.

JACK MOODY, M.D., *Secretary*

EIGHTH COUNCILOR DISTRICT

W. W. TILLMAN, SPRINGFIELD, COUNCILOR

Ozarks Medical Society

The Ozarks Medical Society met Tuesday night, September 8, at The Coffee Pot Cafe in Neosho. There were 59 members, guests and auxiliary members present for dinner. Following dinner a scientific program was conducted at the Sale Memorial Hospital. This consisted of a history of tuberculosis control development and a discussion of the use of the intradermal tuberculin skin test as a preferred means of tuberculosis control.

The Society met on September 8.

Drs. H. M. Hardwicke, Acting Director, Missouri Division of Health; M. L. Furcolow, U. S. Public Health Service; and J. Arthur Myers, presented various aspects of this program in relation to the establishment of the pilot program in Newton County by the State Division of Health and the State Sanatorium with cooperation of the local physicians.

Dr. J. Arthur Myers of Minnesota was the speaker.

Dr. Myers is widely known for his work in the field of tuberculosis. He is Professor Emeritus of Internal Medicine and Public Health at the University of Minnesota Medical School.

A. J. GRAVES, M.D., *Secretary*

Greene County Medical Society

A regular meeting of the Greene County Medical Society was held Friday, September 25, 6:30 p.m. at the Kentwood Arms Hotel with 50 members and three guests present.

The President, Dr. J. G. Siceluff, presided.

Upon motion of Dr. Maher, seconded by Dr. Gentry, minutes of the June meeting were approved as published in the *Bulletin.*

A message of appreciation to the Society for serving as hosts to the hospitality hour for the State Woman's Auxiliary meeting was received from the Executive Board of the Missouri State Medical Association Auxiliary.

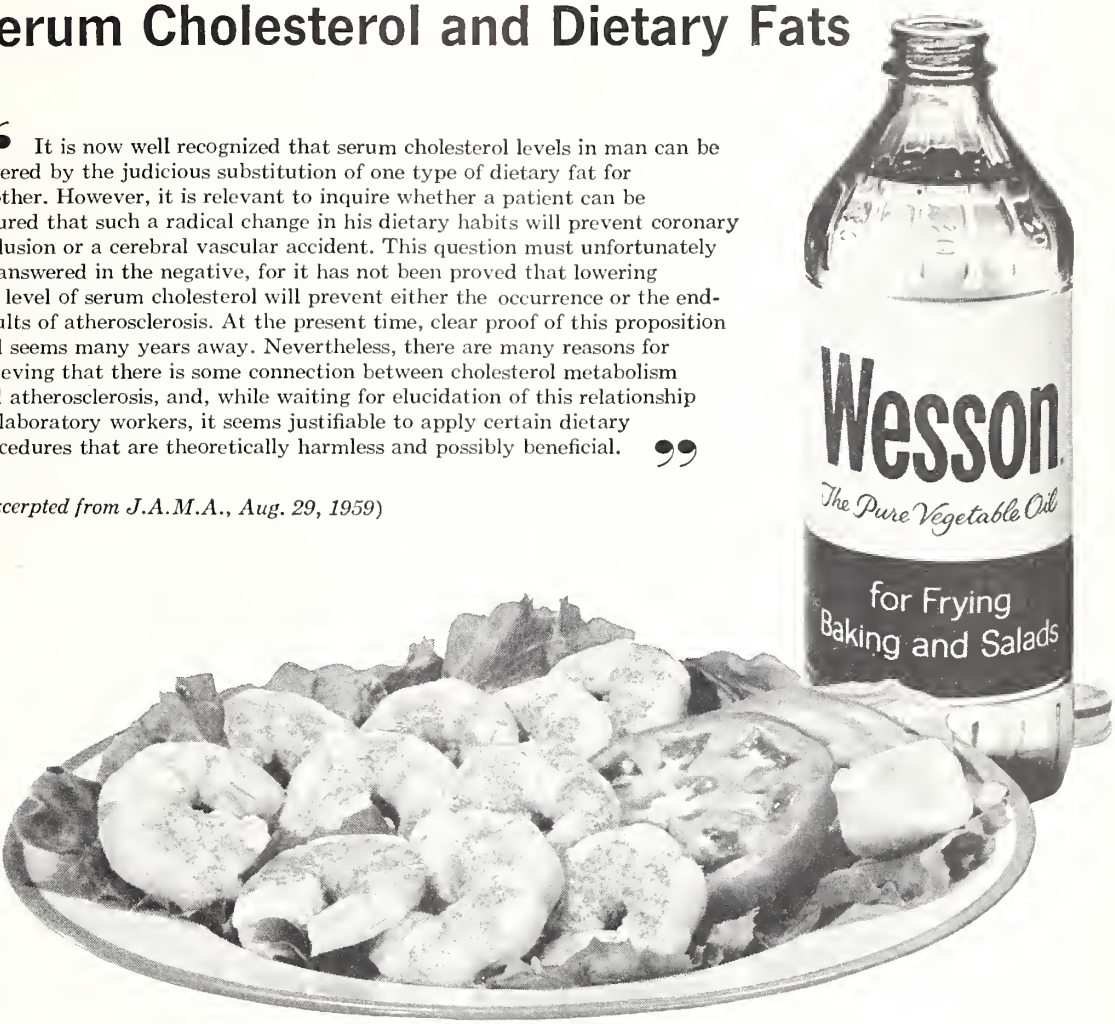
Dr. Siceluff announced that the Missouri Committee for the American Medical Education Foundation has designated October as "Missouri AMEF Month." During this month, every Missouri physician is being urged to contribute to the support of medical education with a gift to the American Medical Education Foundation or to his own alma mater. Further information on AMEF will be found in the October issue of MISSOURI MEDICINE.

Dr. Siceluff expressed his appreciation to Dr. William F. Johnson for heading the United Fund drive for the Society and to the following members of the Society who have assisted with the drive:

A Significant Statement about Serum Cholesterol and Dietary Fats

> "It is now well recognized that serum cholesterol levels in man can be lowered by the judicious substitution of one type of dietary fat for another. However, it is relevant to inquire whether a patient can be assured that such a radical change in his dietary habits will prevent coronary occlusion or a cerebral vascular accident. This question must unfortunately be answered in the negative, for it has not been proved that lowering the level of serum cholesterol will prevent either the occurrence or the end-results of atherosclerosis. At the present time, clear proof of this proposition still seems many years away. Nevertheless, there are many reasons for believing that there is some connection between cholesterol metabolism and atherosclerosis, and, while waiting for elucidation of this relationship by laboratory workers, it seems justifiable to apply certain dietary procedures that are theoretically harmless and possibly beneficial."

(Excerpted from J.A.M.A., Aug. 29, 1959)



Where a poly-unsaturated oil is called for in the diet, Wesson satisfies the most exacting requirements (and the most exacting appetites).

To be effective, a diet must be *eaten* by the patient. The majority of housewives prefer Wesson,* particularly by the criteria of odor, flavor (blandness) and lightness of color.

Uniformity you can depend on. Wesson has a *poly*-unsaturated content better than 50%. Only the lightest cottonseed oils of highest iodine number are selected for Wesson, and no significant variations in standards are permitted in the 22 exacting specifications required before bottling.

Each pint contains 437—524 Int. Units of Vitamin E.

Wesson's Important Ingredients:

Linoleic acid glycerides	50%	to	55%
Phytosterol (predominantly beta sitosterol)	0.4%	to	0.7%
Total tocopherols	0.09%	to	0.12%

Never *hydrogenated—completely salt free*

*Reconfirmed by recent tests against the next leading brand with brand identifications removed, among a national probability sample.

Drs. Paul Morton, James Key, William C. Francis, Arch Lowe, Jr., F. T. Moseley, Thomas E. Cochran, H. B. Ivy, Harold H. Lurie, Paul Pruett, James T. Brown, R. C. Conrad, E. M. Powell, Dallas D. Anthony, M. S. Bonebrake, B. G. Prater, Charles E. Lockhart and James E. Jameson.

The proposed changes in the Constitution and By-Laws of the Society and the presentation of a Constitution and By-Laws for the Greene County Medical Society Foundation as contained in the report of the Constitution and By-Laws Committee was discussed. On motion by Dr. Bonebrake, seconded by Dr. Duncan, the report was accepted as having been read at the meeting. The report was presented to the members present, published in the September *Bulletin* and will be republished in the October *Bulletin.*

In the absence of Dr. James T. Brown, Chairman of the Record-Scholarship Committee, Dr. Siceluff announced that a $1,000 contribution from this fund has been made to the Student American Medical Association to assist in their loan fund for medical students.

Dr. Charles Lockhart announced the October 10 medical and scientific program to be presented by the Missouri Division of the American Cancer Society at the Missouri Hotel in Jefferson City.

Dr. R. C. Conrad presented Dr. George Fuchs, Clinical Assistant in Obstetrics and Gynecology at the University of Missouri School of Medicine, who discussed "Functional Uterine Bleeding." Following the presentation and a discussion period, Dr. Conrad expressed appreciation to Dr. Fuchs for his presentation.

Dr. Siceluff expressed appreciation to Drs. Conrad, Pruitt and German for making the arrangements for the program.

The President announced that Dr. Jack Pierce, Little Rock, Arkansas, will be the speaker at the October 23, meeting. Drs. Stewart, Prater and Ivy are in charge of this program and it will be a presentation of the Merck, Sharp, and Dohme Postgraduate Program.

There being no further business, the meeting was adjourned.

G. Bruce Lemmon, Jr., M.D., *Secretary*

NINTH COUNCILOR DISTRICT

J. H. SUMMERS, LEBANON, COUNCILOR

Mid-Missouri County Medical Society

The Mid-Missouri Medical Society and the doctors' wives met for a dinner meeting on Thursday evening, September 24, at Bennett Springs Lodge near Lebanon.

The evening festivities began with a social hour followed by dinner and then the program. The discussion for the evening was presented by a representative of the investment firm of Merritt, Fitch and Morris, of Kansas City. The subject of his discussion was "Investments for Doctors."

M. K. Underwood, M.D., *Secretary*

TENTH COUNCILOR DISTRICT

BEN M. BULL, IRONTON, COUNCILOR

Butler-Ripley-Wayne County Medical Society

A dinner meeting of the Butler-Ripley-Wayne County Medical Society was held at the Hickory House in Poplar Bluff on Wednesday evening, September 23.

The scientific program for the evening was presented by Dr. Emilio Canlas, Radiologist, Poplar Bluff, and featured "A Review of Interesting X-Ray Films," coupled with discussion from the audience.

There was a rather lengthy business discussion concerning proposed amendments to the constitution and by-laws of the county medical society. The applications for transfer to the Butler-Ripley-Wayne County Medical Society by Drs. James and William Turner were laid over for action at the October meeting since neither of the applicants were present.

The attendance at this meeting was considered only fair.

E. T. Hansbrough, M.D., *Secretary-Treasury*

Mineral Area County Medical Society

The Mineral Area County Medical Society met on Thursday night, September 24, in the Clinic Building of the State Hospital in Farmington.

An interesting program on "Muscle Diseases" was given by Otakar Machek, M.D., of St. Louis. Dr. Machek is the Medical Director of Physical Medicine and Rehabilitation at the St. Louis University group of hospitals.

This was an interesting and informative discussion.

George L. Watkins, M.D., *Secretary*

DEATHS

Heilbrunn, Max, M.D., Lockwood, a graduate of Ludwig Maximilians University, 1923; member of Barton-Dade County Medical Society; aged 62; died August 26.

Hearst, Allen L., M.D., Kansas City, a graduate of Ensworth Medical College, 1912; member of Jackson County Medical Society; aged 82; died September 8.

Hanser, Otto C., M.D., St. Louis, a graduate of St. Louis Physicians and Surgeons College, 1918; member of St. Louis County Medical Society; aged 76; died September 14.

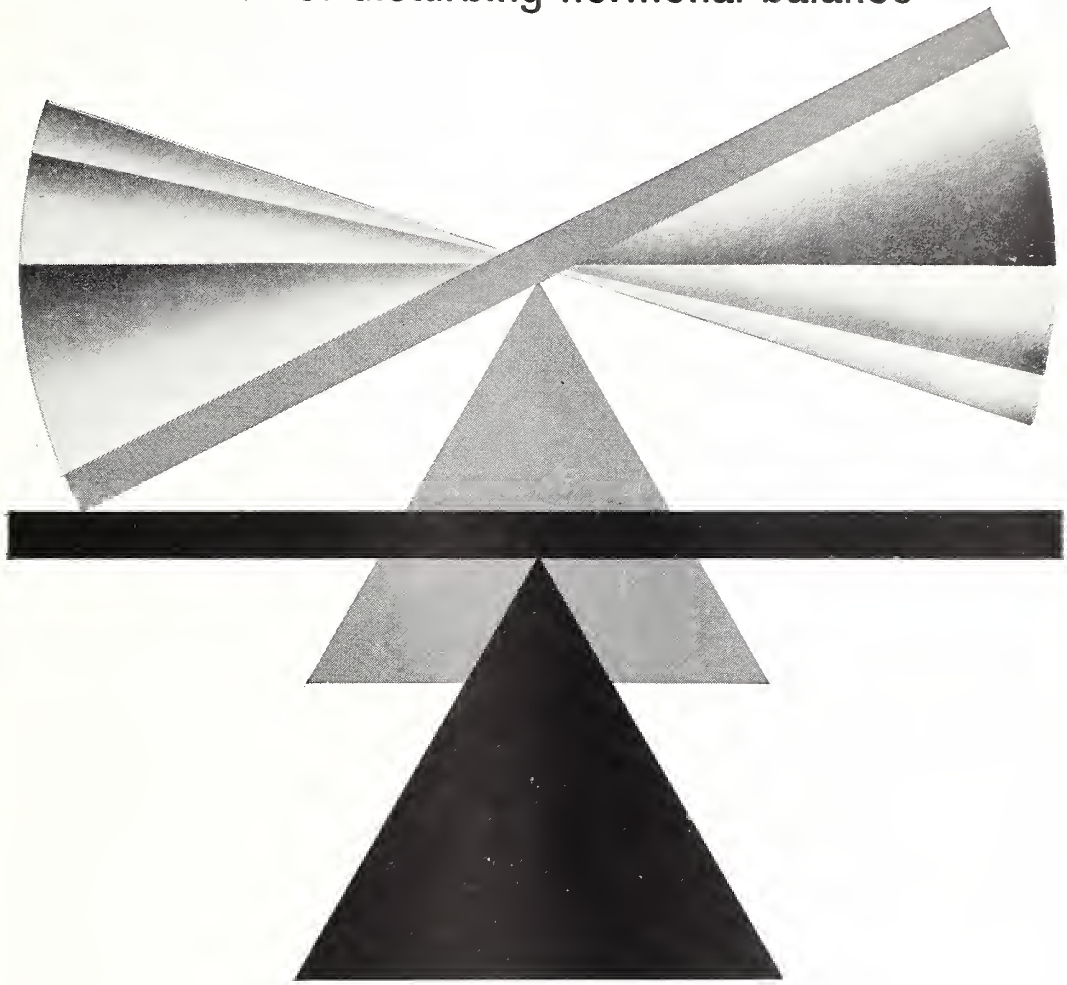
Effective relief in rheumatic disorders

Sterazolidin® capsules

prednisone-phenylbutazone Geigy

Geigy

with less risk of disturbing hormonal balance



In the treatment of the rheumatic disorders new Sterazolidin provides a method of limiting the gravest danger inherent in steroid therapy... hypercortisonism arising from excessive dosage.

Repeatedly it has been shown that the addition of low dosage of Butazolidin sharply reduces hormone requirement.[1-4] Sterazolidin is a combination of prednisone (1.25 mg.) and Butazolidin (50 mg.) which provides, in the majority of cases, consistent relief at a stable uniform maintenance dosage significantly below the level at which serious hormonal imbalance is likely to occur.

Sterazolidin® (prednisone-phenylbutazone Geigy). Each capsule contains prednisone 1.25 mg.; phenylbutazone 50 mg.; dried aluminum hydroxide gel 100 mg.; magnesium trisilicate 150 mg. and homatropine methylbromide 1.25 mg.

1. Kuzell, W. C., and others.: Arch. Int. Med. 92:646, 1953. 2. Wolfson, W. Q.: J. Michigan M. Soc. 54:323, 1955. 3. Strandberg, B.: Brit. J. Phys. Med. 19:9, 1956. 4. Platt, W. D., Jr., and Steinberg, I. H.: New England J. Med. 256:823 (May 2) 1957.

Geigy, Ardsley, New York

03859

New Members

John L. Beattie, M.D., 1st National Bank Bldg., Joplin, became a member of the Jasper County Medical Society on September 1, 1959. Dr. Beattie is a native of Nebraska, received his preliminary education in Nebraska, and his M.D. degree from the University of Nebraska School of Medicine in 1951.

John R. Boswell, M.D., 1 Country Fair Lane, St. Louis, became a member of the St. Louis Medical Society on August 26, 1959. Dr. Boswell is a native of Illinois, received his preliminary education in Illinois, and his M.D. degree from the University of Illinois College of Medicine in 1951. He interned at Indianapolis General Hospital, Indiana, and served a residency at St. John's Hospital, St. Louis.

Ralph Copp, Jr., M.D., 3720 Washington Blvd., St. Louis, became a member of the St. Louis Medical Society on August 12, 1959. Dr. Copp is a native of Missouri, received his preliminary education in Missouri, and his M.D. degree from Washington University School of Medicine, St. Louis, in 1952. He interned at Barnes Hospital, St. Louis, and also served a residency at Barnes Hospital.

Thomas F. Dilday, Jr., M.D., Medical Arts Bldg., Joplin, became a member of the Jasper County Medical Society on September 1, 1959. Dr. Dilday is a native of Arkansas, received his preliminary education in Arkansas, and his M.D. degree from the University of Arkansas School of Medicine in 1954. He interned at University Hospital, Little Rock, Arkansas, and served a residency at Gorgas Hospital, Balboa Heights.

Patrick C. Hogan, M.D., 2623 Telegraph Road, St. Louis, became a member of the St. Louis Medical Society on August 12, 1959. Dr. Hogan is a native of Ireland, received his preliminary education in Ireland, and his M.D. degree from the National University of Ireland, Dublin, in 1951. He interned at St. Joseph's Infirmary, Atlanta, Georgia, and served a residency at DePaul Hospital, St. Louis.

Samuel R. Joseph, M.D., 3833 Botanical Ave., St. Louis, became a member of the St. Louis Medical Society on August 26, 1959. Dr. Joseph is a native of Pennsylvania, received his preliminary education in Ohio, and his M.D. degree from St. Louis University School of Medicine, St. Louis, in 1953. He interned at St. Louis City Hospital and served a residency there also.

Morris N. King, M.D., 507 S. Euclid, St. Louis, became a member of the St. Louis Medical Society on August 26, 1959. Dr. King is a native of Oklahoma, received his preliminary education in Oklahoma, and his M.D. degree from Vanderbilt University School of Medicine in 1951. He interned at Barnes Hospital in St. Louis.

William G. Lockhart, M.D., 902 Edmond St., St. Joseph, became a member of the Buchanan County Medical Society on September 1, 1959. Dr. Lockhart is a native of Arkansas, received his preliminary education in Arkansas, and his M.D. degree from University of Arkansas School of Medicine in 1950.

Carl T. Rinker, M.D., Macon, became a member of the Chariton-Macon-Monroe-Randolph County Medical Society on September 1, 1959. Dr. Rinker is a native of Colorado, received his preliminary education in Colorado, and his M.D. degree from the University of Colorado School of Medicine in 1956.

Miguel Santiago, M.D., 2811 Robyn Road, St. Louis, became a member of the St. Louis Medical Society on August 26, 1959. Dr. Santiago is a native of Puerto Rico, received his preliminary education in Puerto Rico, and his M.D. degree from St. Louis University School of Medicine in 1952. He interned at St. Mary's Hospital in Clayton and served a residency at Barnes Hospital, St. Louis.

Lee C. Sheppard, Jr., M.D., University of Missouri Medical Center, Columbia, is a new member of the Boone County Medical Society. Dr. Sheppard is a native of Virginia, received his preliminary education in Missouri, and his M.D. degree from St. Louis University School of Medicine in 1959. He has begun his internship at the University of Missouri, Columbia.

Joe R. Smith, M.D., Professional Bldg., Columbia, is a new member of the Boone County Medical Society. Dr. Smith is a native of Missouri, received his preliminary education in Missouri, and his M.D. degree from Washington University School of Medicine, St. Louis, in 1955.

John C. Stockdale, M.D., 11 South 8th St., Columbia, is a new member of the Boone County Medical Society. Dr. Stockdale is a native of Nebraska, received his preliminary education in Nebraska, and his M.D. degree from the College of Medical Evangelist in 1958.

Joseph C. Ungvari, M.D., 3284 Ivanhoe St., St. Louis, became a member of the St. Louis Medical Society on August 26, 1959. Dr. Ungvari is a native of Hungary, received his preliminary education in Hungary, and his M.D. degree from Karl Franzens University of Medicine, Graz, Austria, in 1947. He interned at St. Francis Hospital, La-Crosse, Wisconsin, and served a residency at St. Joseph's Hospital, Kirkwood.

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The Council

The Council met at Hotel President, Kansas City, September 26, 27, 1959, with J. H. Summers, M.D., Lebanon, Chairman, presiding. Present were Drs. Summers; Donald M. Dowell, Chillicothe; J. J. Wimp, Kirksville; Leonard T. Furlow, St. Louis; Paul R. Whitener, St. Louis; Byron M. Stuart, Boonville; O. B. Barger, Harrisonville; Kenneth C. Hollweg, Kansas City; W. W. Tillman, Springfield; Ben M. Bull, Ironton; Ralph Perry, Kansas City; R. O. Muether, St. Louis; John I. Matthews, Jefferson City; Charles R. Doyle, St. Louis; Messrs. John Noble, Kennett; Don Irish and W. H. Bartleson, Kansas City; John Buckner, Springfield; Lemoine Skinner, Jordan Singleton, Hollister Smith, Ray McIntyre and Tom R. O'Brien, St. Louis, and Helen Penn, St. Louis. During a portion of the meeting Drs. Durward G. Hall and W. S. Sewell, Springfield; H. E. Petersen, St. Joseph, and Vernon E. Wilson, Columbia, were present.

EXECUTIVE SECRETARY'S REPORT

The following report was presented by Mr. O'Brien:

"It occurred to me that, beginning with this meeting and at each meeting hereafter, if you wish, an Executive Secretary's Report should be presented. As I visualize it, the report should not take long to present, it should be mimeographed, and should cover as briefly as possible some highlights of major activities since the last Council meeting.

"Attached to the report is copy of letter received from Dr. Hardwicke and our disposition of the various items listed by Dr. Hardwicke. Of the committees mentioned in our letter, we hope to schedule most of them for October or November meeting dates.

"You were informed by letter, from time to time, as to the Forand hearings. I have tried to thank the various non-medical groups who opposed the bill as well as the many doctors who wrote letters of opposition. Among such non-medical groups were the Missouri State Chamber of Commerce and local affiliates, Missouri Public Expenditure Survey, the insurance industry, Blue Shield, Druggists Association and the Missouri Farm Bureau Federation. The bill, of course, was laid to rest for this year but will be very much on the agenda of Congress in 1960, the election year.

"The new State Board of the Healing Arts has been appointed since our last meeting. I had two sessions with Governor Blair regarding that. I suggested to him that he is as much interested in seeing that this board gets off to a good start as we are; otherwise, he would not have included the item in his message to the legislature at the beginning of this year.

"The appointment of Drs. Perry, Francka, Sewell, O'Reilly and Loyd, as well as the osteopathic members, Drs. Michael and Matheny, indicates that the Governor agreed with us about getting off to a good start and that persons familiar with the purposes of the act should serve on the first board. I thanked the Governor for his consideration of our suggestions. Incidentally, Dr. Sewell was elected President and Dr. Loyd of Jefferson City was elected Secretary. (Dr. Perry may wish to comment about the first meeting which was held on September 20.)

"The Advisory Committee to the Division of Welfare was appointed by Mr. Carter, Director of that agency. Drs. Stanley Peterson, Chairman of the MSMA Committee on Aging, and Avery Rowlette, Chairman of the MSMA Committee on Medical Economics, were appointed to serve on this seven man committee. They attended the first meeting, as did I, and assisted in the development of rules and regulations for the hospitalization or nursing home care of welfare recipients. You will recall that the legislation followed the outline recommended by the House of Delegates in that all funds are to be used for hospitalization or nursing home care."

On motion of Dr. Hollweg, it was voted that the Executive Secretary be asked to continue a written report to the Council.

DIVISION OF HEALTH

The letter from Dr. Hardwicke concerning the Division of Health and the answer to the letter which gives the referrals of the various items to committees, both of which were presented at the meeting, were discussed.

BOARD OF HEALING ARTS

Dr. Perry reported briefly on the recent meeting of the new State Board of the Healing Arts. He said that personnel to assist the Board had been selected and that type of examination was under consideration.

A.M.A. MEETINGS

On motion it was voted to pay the expenses of Dr. John J. O'Hearne, Kansas City, Chairman of the Committee on Mental Health, and of Dr. Carl D. Siegel, Sedalia, Chairman of the Committee on Civil Defense, to meetings in these fields which will be held soon by the A.M.A.

TREASURER'S REPORT

Dr. Doyle gave a report of receipts and disbursements during the first eight months of the year, together with comparison with the budget which had been approved. The report showed the finances within the budget.

Authorization was asked and voted to sell and reinvest the money from a $5,000.00 Series K government bond. This particular bond requires the endorsement of officers of the Association and a resolution was adopted authorizing any two of the officers to endorse such bonds.

The purchase of a new addressograph for the office was approved.

FIELD SECRETARY'S REPORT

Mr. McIntyre reported the locations and names of thirty-one physicians who have located recently in rural Missouri. He said that most of these doctors received information on Missouri locations through the State Medical Association Placement Department.

Mr. McIntyre described the work of the Sears Roebuck Foundation in aiding rural communities to survey their need for additional doctors and told of locations in Missouri where this had been done and where communities were raising funds to build a doctor's clinic to help attract a physician to the locality.

He announced that the University of Missouri Medical School Preceptorship Program this year will include four six-week periods beginning on December 4, January 6, February 29 and April 12. He said that the number of preceptees this year is twenty-one, double that of last year. Rural physicians to serve as preceptors are being solicited.

He announced that Dr. E. J. Schwartz, Springfield, Chairman of the Committee on Infant and Child Care, had appeared on the program of the Missouri Association of School Administrators at a workshop in Columbia on June 25. He said that the committee on Infant and Child Care thought it advisable for each component society to have a functioning committee on school health to work with their local schools.

He told of a dinner meeting at St. Louis Medical Society on September 15, with the athletic coaches of the area at which athletic injuries were discussed.

He announced a meeting to be held by the A.M.A. on the "Medical Aspects of Sports" on November 30, in Dallas, Texas, immediately preceding the A.M.A. Clinical Session, December 1-4. The National Conference on Physicians and Schools will be held at Highland Park, Illinois, October 13-15, and will be attended by Drs. E. J. Schwartz, Springfield, and Guy Magness, University City, members of the Committee on Infant and Child Care.

Mr. McIntyre reported on the A.M.A. Public Relations Conference held in Chicago in August and presented reprints from the *Congressional Record* of a presentation by Hon. Clark W. Thompson of Texas in the House of Representatives on "The Medical Education Situation," representing an exchange of letters between Rep. Thompson and his longtime friend, Dr. Blasingame of the A.M.A. (This appears as a Special Article in this issue.)

Mr. McIntyre reported on attending a session of a course in practical politics being taken by members of the Greene County Medical Society. This course is promoted by the U. S. Chamber of Commerce and the Missouri State Chamber of Commerce. Dr. Tillman and Dr. Hall added briefly to the report.

The Field Secretary closed his report with a brief run-down on medical society meetings he had recently attended, including Ozarks, West Central and a joint meeting at Clinton.

COMMITTEE ON HEALTH AND INSTRUCTION REPORT

Dr. McDaniel discussed the report of the Committee on Health and Public Instruction which follows:

Committee on Health and Public Instruction
Coronado Hotel, St. Louis
June 28, 1959

PRESIDING

John R. McDaniel, M.D., St. Joseph, Chairman.

PRESENT

Drs. McDaniel; J. Earl Smith, St. Louis; E. A. Belden, Jefferson City; Mr. Ray McIntyre and Helen Penn, St. Louis. There not being a quorum present, it was decided that those present would take action, pending approval by mail by other members of the Committee.

PURPOSE

Dr. McDaniel reviewed the purpose of the Committee and the present meeting as well as the history of the Committee.

STATE FAIR

It was reported that the MSMA had stopped exhibiting at the Missouri State Fair because space allotted had not been satisfactory in recent years—commercial exhibits being interspersed in health exhibits. It had originally been in the Education Building, which became the Commercial Building, and the plan for exhibits dealing with health to be placed together had not worked out. It was the consensus that the exhibit was valuable, if well placed, and the Committee voted to recommend to the Council that the exhibit be resumed if suitable space could be worked out. It was voted that the Council recommend to the Division of Health that it resume its exhibit, also based on the availability of suitable space.

COUNTY FAIRS

County and district fairs were discussed, it being felt that again many people could be reached easily with health information through this media. It was suggested that the County Medical Societies' Woman's Auxiliaries might take the leadership in manning such exhibits and Dr. Belden said that in localities where there is public health personnel, help could be obtained from that source. Home shows were also discussed and it was recommended that a letter go from the President of MSMA to presidents of component medical societies urging them to take advantage of these opportunities for health education to the local public.

TV, RADIO AND EDUCATION

Radio and TV presentations were discussed and it was felt that this is a local project since each locality varies in its facilities and attitude toward health education. It was felt that component societies should be encouraged to promote both spot announcements and programs available through the A.M.A. and insurance companies. Pamphlets which are furnished by the A.M.A. for distribution by physicians to their patients were displayed and discussed. It was recommended that a packet of this material be sent to secretaries of component societies that he might present to his membership these possibilities.

SCIENCE FAIRS

Science Fairs by students were discussed. It was reported that some county medical societies offer prizes for top exhibits. One society offered a prize for the best exhibit and the student chose a trip through the University of Missouri Medical Center. The Committee recommends that component societies sponsor these fairs to the extent of offering an appropriate financial award to Science Fair winners.

RECRUITMENT

The recruitment of medical students and Career Day programs were discussed briefly. The Committee feels that physicians should be more active in high school Career Day programs. It was reported that several physicians recently had been on such programs.

SPEAKERS

Medical speakers for lay audiences on health subjects were discussed and specific instances of such meetings were given. Members of the Committee were asked to let Mr. McIntyre have suggestions for obtaining such speakers.

COUNCIL

It was decided that Dr. McDaniel would present the report of the Committee to the Council, on the approval of other members of the Committee who were not present.

ANNUAL SESSION PROGRAM

Dr. Matthews reviewed the program for the 1960 Annual Session to be held in St. Louis, March 13 to 16, and said that it was near completion and that it would appear in a forthcoming issue of Missouri Medicine.

DEFINITION OF WORD "PHYSICIAN"

A letter from the St. Louis Medical Society asking that clarification of the definition of "Physician" be obtained was read. The situation of absentee ballots being signed by a chiropractor was discussed and the consensus was that this case should not be pursued further at this time; also it was felt that the final section of S.B. 50 would bring about some clarification.

CONSULTATION

The question of consultation with osteopathic physicians as presented by a member of a component society was discussed. It was felt that this must be decided at the component society level. It was suggested that the A.M.A. delegates attempt to get better clarification from the A.M.A.

WOMAN'S AUXILIARY

Mrs. Stanley S. Peterson, Springfield, President of the Woman's Auxiliary, reported on the work of the Auxiliary and discussed the Sunday evening reception preceding the Annual Session, the possible need of an executive secretary for the Woman's Auxiliary, reprints of the Woman's Auxiliary page in Missouri Medicine, and space for files.

After thanking Mrs. Peterson for her presentation and discussion, it was decided that the Association should not take over the Sunday evening reception and that more space would be given the Auxiliary for files in the Association office. It was suggested that the Woman's Auxiliary present a report to the House of Delegates.

LEGISLATIVE MEETING

A National Legislative Conference to be held in St. Louis on October 2 and 3 was announced.

CORPORATE PRACTICE

Dr. Muether presented the following report from the Special Committee to Study the Corporate Practice of Medicine:

"The Special Committee to Study the Corporate Practice of Medicine met at the Coronado Hotel, St. Louis, September 13, 1959.

PURPOSE

"Dr. Muether reviewed the action of the House of Delegates, 'That a special committee be appointed to investigate all instances said to entail the corporate practice of medicine, to recommend to the Council courses of action in those cases which the committee determines to involve the corporate practice of medicine and to be against the long-range interest of the public and, with the approval of the Council, take whatever legal or legislative steps are necessary to force cessation of such practice in the interest of the public's welfare. It is further recommended that this committee be made up of nine members including representation of various fields of medical interest, and should be empowered, subject to Council approval, to employ legal counsel, research assistance and other consultants in specialized or technical areas which may be necessary in the course of their work. . . .'

PANEL AND FREE CHOICE

"Actions of the House of Delegates in regard to panel systems and free choice were reviewed briefly, it being pointed out that the A.M.A. has softened its attitude to some of the plans of medical care, the main thing seeming to base on competency of the care given, and the privilege of the patient to have the right to choose his method of receiving care, if not the absolute choice of physician. It was pointed out that fringe benefits being untaxable has caused promotion of many plans. Reviewing the A.M.A. stand concerning panel systems, the A.M.A. does not oppose them as such and leaves it to state associations to handle in the individual states.

POSSIBLE INSTANCES OF CORPORATE PRACTICE

"The members of the committee presented instances of what each thought might be termed the corporate practice of medicine, reviewing the recommendations of the House of Delegates on what should be condemned as the corporate practice of medicine as follows:

"1. Governmental institutions which are primarily tax supported but which charge patients deemed able to pay.

"2. General hospitals, which have teaching programs and charge for the services of physicians in training.

"3. Closed panel system which charge for the services on either a prepayment or post-payment basis.

"4. Private individuals or corporations which employ physicians and purvey their services for profit.

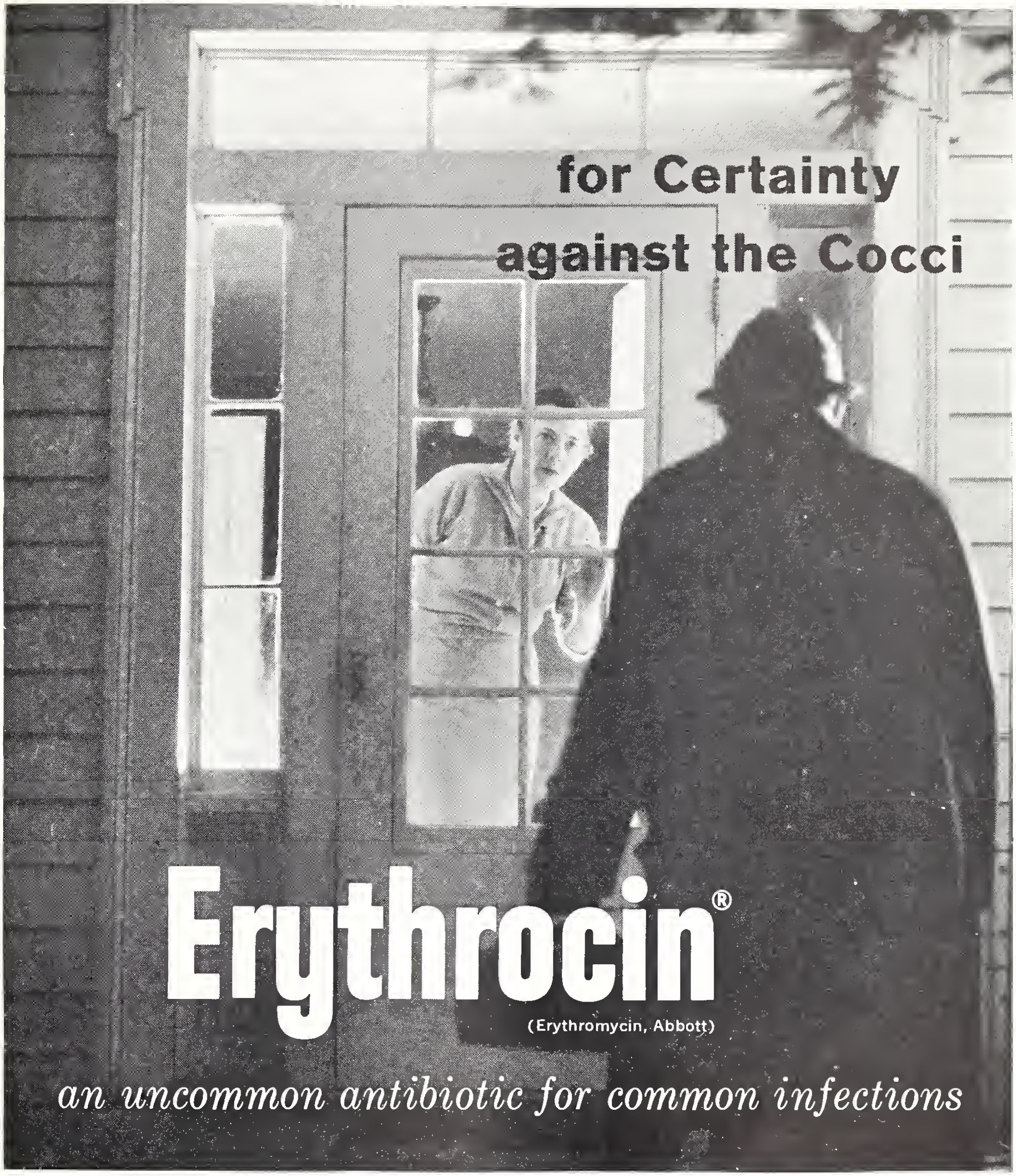
"Also taken into consideration were the exclusions set out by the House of Delegates, as follows:

"1. Medical Schools and their affiliated teaching hospitals where full-time employed instructors, primarily engaged in the teaching of undergraduate medical students in addition to supervising the treatment of medical and surgical patients, charge for their personal services.

"2. State and City institutions for the treatment of chronic conditions such as mental illness and tuberculosis, which care for private patients referred by individual practicing physicians.

CONCLUSION

"After discussion of what was known, or premised,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about several institutions, the trend of patients to remain in institutions where charges will be less, situation of residents and interns in performing services in a physician's name, possible exploitation of physicians by some hospitals, special funds set up by certain hospitals, it was decided that not enough specific information was available and that a survey or some means of obtaining this information would be necessary before any definitive action could be recommended.

DEFINITION

"Further discussion brought out that the definition set forth by the House of Delegates of corporate practice might not be sufficiently encompassing, the definition reading: 'The corporate practice of medicine is a system which involves the employment of a physician by an individual organization (other than an individual physician or organization composed solely and exclusively of physicians) for the purpose of rendering medical care or services to patients when the fees or remuneration for such services collected by the organization, by a department thereof or by an associated organization and used for its general purposes rather than fully for the direct compensation of the physician rendering the care.'

ACTION

"It was decided that the following would be necessary before the committee could intelligently start on special work:

"1. Definition of corporate practice of medicine should be obtained from legal sources, from the Judicial Council of the A.M.A., from other states and, if possible, from the Attorney-General of Missouri.

"2. Employment of help for a survey, either an individual or a company that does this type of work.

"3. The working out of a dossier explaining purpose of the survey and a questionnaire that would be used.

"It was suggested that members of the committee submit questions that should be used in the survey.

COUNCIL ADVICE

"It was decided to present these actions to the Council for approval before proceeding with the work."

On motion of Dr. Tillman, recommendation 1 was approved. On motion of Dr. Doyle, recommendations 2 and 3 were approved.

AMEF

Material which will appear in the October issue of Missouri Medicine on the American Medical Education Foundation was presented and it was announced that a letter would go to each member soon after the first of October, October being designated AMEF month.

LIFE INSURANCE

A group life insurance proposal of the Financial Planning Company of St. Louis, reported at the Council meeting of June 25, a verbal proposal of Eggert-Carroll-Schroeder and Altman Singleton Company, to provide similar coverage, and a letter from the Insurance Research Company of St. Louis proposing a comprehensive program of life insurance, annuity and mutual investment fund benefits were discussed.

The Jackson County Medical Society has been studying proposals for a group life insurance program for many months and two offerings which were made to that organization were presented.

The failure of such programs in the past, including those of St. Louis and Jackson County Medical Society which did not secure a sufficient number of applicants, were discussed. The reason why such programs failed in the past were brought out.

After discussion, it was agreed that the program proposed by Insurance Research Company should be studied further, subject to clarification and further consideration of the Council.

DISABILITY INSURANCE

The program of disability insurance was approved by the Council at its June meeting. Following that meeting a brochure was prepared by the insurance company which included one item which had not been contained in the original proposal. This related to the offering of surgical benefits to members on an optional basis.

On motion of Dr. Whitener it was agreed to include the surgical benefit option in the material which will be sent to all members.

BUDGET COMMITTEE

The Chairman appointed the following Budget Committee: Dr. Doyle, Chairman; Drs. Perry, Muether, Stuart, Bull and Tillman with the Chairman ex officio. He announced that the committee would meet on Friday evening preceding the next Council meeting.

HOSPITAL LICENSING

Dr. Stuart presented a letter from the Callaway County Hospital asking assistance in clarifying the rules and regulations concerning hospital licensing. After discussion, on motion of Dr. Tillman, the material from the hospital was referred to the Committee on Hospital and Professional Relations with the request that the committee report to the Council at its next meeting.

HOSPITAL ADMINISTRATORS MEETING

A meeting of hospital administrators, hospital trustees and chiefs of hospital medical staffs, proposed by the Missouri Hospital Association, was discussed. A preliminary meeting to discuss possible dates, location and topics for discussion is to be held during the next two weeks.

A Recommended Guide for Hospital Medical Staff Relations, originally proposed by the Missouri Hospital Association, which was approved by the MSMA House of Delegates in 1958, has been rejected by the Missouri Hospital Association. This will be reported on further after the Committee on Hospital and Professional Relations meets.

GREENE COUNTY BY-LAWS

New by-laws of the Greene County Medical Society were explained as setting up a Medical Education Foundation. It was stated that these had been checked with the Association by-laws and by our attorney. On motion of Dr. Stuart, the by-laws were approved.

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EDITORIAL BOARD

Dr. Doyle announced two replacements on the Editorial Board: Dr. Carl A. Moyer, St. Louis, to replace Dr. A. N. Arneson, and Dr. Robert Jackson, Columbia, to replace Dr. Roscoe L. Pullen.

THANKS TO DR. AND MRS. PERRY

On motion of Dr. Stuart, Dr. and Mrs. Perry were thanked for the party on Saturday evening to which Councilors were invited.

REPRESENTATIVE CURTIS

Mr. James Foristel of the Washington A.M.A. Office and Representative Tom Curtis from Missouri visited and spoke to the Council briefly. Representative Curtis praised physicians for their growing interest in citizenship. He said their broader interest would dispel the feeling that the doctor is narrow and only interested in legislation that affected him directly.

NEXT MEETING

It was decided that the next meeting of the Council would be held at Hotel Chase, St. Louis, on December 12 and 13.

HOME TOWN MEDICAL PROGRAM

Physicians participating in the Veterans Administration's home town medical program on a fee-treatment basis now come under a one-time "long-term" authorization, according to P. S. Pollock, manager of the St. Louis VA Regional Office.

The "long-term" authorization, placed in effect July 1, 1959, was developed to conserve time for the physician, and to cut down on his record keeping and book work, in the belief that the treatment needs of many patients could be predicted for a period longer than 30 days.

Now, virtually every fee-treatment case can be authorized on a "long-term" basis.

Service-connected veterans are eligible to receive home town treatment from their own physicians when they live long distances from a VA out-patient clinic.

Since July 1, with few exceptions, the authorizations sent physicians participating in the program will remain effective from the month in which the authorization was issued until June 30, 1960.

The authorization, in addition, will include a statement defining the extent of medical service it is reasonable to assume will be required by the patient during the period covered by the authorization.

The physician need not request renewal of the authorization during this period, nor must he obtain additional authorization if he finds it necessary to make minor deviations from the treatment plan, unless the authorization contains such a limitation.

"We would expect to hear from the physician," Pollock said, "if he determines that the veteran's needs for treatment are at great variance from the service he is authorized to provide. In that event, VA will cancel the existing authorization and provide one better suited to the patient's requirements," he said.

MISSOURI TO PARTICIPATE IN EPIDEMIOLOGIC STUDY OF CANCER

As reported in the July 11, 1959 issue of the *Journal of the American Medical Association,* the American Cancer Society is undertaking a large-scale study of cancer in relation to various environmental factors. The plan is to enroll about 500,000 families nationwide of which about 50,000 will be enrolled in Missouri beginning in November. Volunteer workers of the Society will be used to enroll families in which there is at least one person over the age of 45 and then request every member who is over the age of 30 to fill out a questionnaire. In order to keep the information confidential, each subject will put his filled-out questionnaire in an envelope and seal it before returning it to the volunteer for transmittal to the research center. The volunteers will not interview the subjects and will not see the completed questionnaires.

The subjects will be followed annually for six years to determine which of them die in this interval. Causes of death will be ascertained from death certificates. When cancer is mentioned on a death certificate, the physician who reported it will be requested to supply additional medical information (e. g., histologic type, stage of disease at time of diagnosis).

The major purpose of the study is to ascertain the association, if any, between various environmental factors (such as occupational exposures, habits, diet, factors related to the breast and female genital organs) and the later occurrence of cancer. It is hoped that this will yield clues as to a number of possible causes of cancer.

In addition, it is hoped that the study will provide information of value in relation to lay education. The subjects are asked detailed questions about "present physical complaints" and the answers be analyzed in relation to cases of cancer diagnosed in the subsequent several months.

In order to avoid biasing the subjects, questions are asked about physical complaints which are probably not related to cancer as well as about complaints which may be symptomatic of cancer. Assuming, as is probable, that positive answers to certain of these questions are highly related to the presence of cancer, the data should be of value in persuading people with such complaints to see their doctor immediately. The aim, of course, is to reduce the factor of "patient delay" in the diagnosis of cancer.

A.H.A. CHANGES HOSPITAL LISTING

By action of its board of trustees on August 26, 1959, the American Hospital Association amended its rules to permit the listing of hospitals with osteopaths on their staff, providing their work is under the general supervision of doctors of medicine. A statement concerning the change follows, the changes appearing in italics:

"The primary aim of the program of accepting hospitals for listing is to provide a census of hospitals. Listing is not intended to be a measure of quality of care.

"Any institution which can be classified as a hospital, according to the requirements, may be listed if it so desires. Membership in the American Hospital Association is not a prerequisite.

"1. The hospital shall have at least six beds for the care of patients who are nonrelated, who are sick and who stay on the average in excess of 24 hours per admission.

"2. The hospital shall be licensed in those states and provinces having licensing laws.

"3. Only doctors of medicine *or doctors of osteopathy* shall practice in hospitals listed by the American Hospital Association. (This requirement is not intended to eliminate dental and similar services from the hospital. Patients admitted for such services, however, must have an admission history and a physical examination done by a physician on the (*medical* removed) staff of the hospital, and a physician on the (*medical* removed) staff of the hospital shall be responsible for the patient's medical care throughout his stay.)

"4. Duly authorized by-laws for the (*medical staff* removed) *staff of physicians* shall be adopted by the hospital.

"5. (*The hospital shall submit evidence of regular medical supervision of patients* removed.) *The hospital shall submit evidence of regular care of the patient by the attending physician and of general supervision by the attending physician and of general supervision of the clinical work by doctors of medicine.*

"6. Records of clinical work shall be maintained by the hospital on all patients and shall be available for reference.

"7. Registered nurse supervision and such other nursing service as is necessary to provide patient care around the clock shall be available at the hospital.

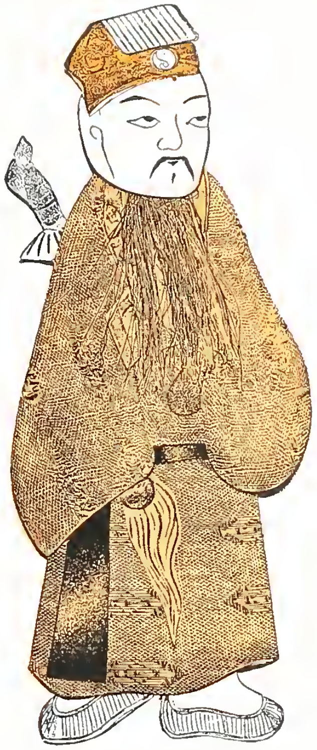
"8. The hospital shall offer services more intensive than those required merely for room, board, personal services and general nursing care.

"9. Minimal surgical or obstetrical facilities (including operating or delivery room), or relatively complete diagnostic facilities and treatment facilities for medical patients, shall be available at the hospital.

"10. Diagnostic x-ray services shall be regularly and conveniently available.

"11. Clinical laboratory services shall be regularly and conveniently available."

immortals of chinese mythology:



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The Specialty Journals in Brief

The Clinical Significance of a Lump in the Throat

G. Edward Tremble: A.M.A. Arch. Otolaryng. **70**:157-165 (Aug.) 1959.

The sensation of a lump in the throat is a common complaint and is generally treated lightly, but to assume that it is purely functional without due examination in a given case is dangerous. The emotional lump in the throat is probably a spasm of the cricopharyngeus muscle, which is the lowermost portion of the m. constrictor pharyngis inferior and serves normally as the sphincter of the esophagus. The lump which moves up and down commonly represents the results of inflammation of the nasopharyngeal mucosa after influenza. The lump with aching is most often found in women and is associated with hypothyroidism. In the case presented, however, a lump that had been assumed at first to be functional in origin and later ascribed to chronic lingual tonsillitis, was ultimately found to be a squamous-cell carcinoma on the tongue at the level of the tip of the epiglottis. The discomfort connected with pharyngitis is not necessarily proportional to the extent of the pathological changes found on examination. The temptation to explain a lump in the throat as a form of neurosis should be resisted, and the physician should use all the means at his disposal to make a diagnosis and give appropriate treatment.

Ocular Manifestations of the Chronic Renal Tubular Insufficiency Syndromes

Harold F. Falls: A.M.A. Arch. Ophth. **62**:188-195 (Aug.) 1959.

It is now possible to explain the association of certain conspicuous types of ocular disorder with insufficient renal tubular reabsorption. Three such disorders are Lowe's cerebro-ocular syndrome (congenital or early infantile cataract with hydrophthalmos), pseudohypoparathyroidism, and Fanconi's syndrome (vitamin D-refractory rickets with other extensive metabolic disturbances). A case of Lowe's syndrome in a boy-baby 3 months old is described with emphasis on the ocular and urinary findings. Pseudohypoparathyroidism was observed in a man aged 39 who had always been confined either to his home or to an institution because of profound mental and physical deficiencies including progressive impairment of vision. In Fanconi's syndrome (not illustrated) cysteine crystals appear in the conjunctiva and cornea. These disorders are readily understood when it is considered that renal tubular reabsorption concerns the phosphates, amino acids, and basic elements. They are important to the ophthalmologist because the characteristic findings enable him to contribute valuable diagnostic information to the internist and others concerned in the treatment of these severe derangements of metabolism. Exact diagnosis is essential not only for effective treatment but also for counselling families in which these derangements occur.

The Surgical Conscience

W. A. Altmeier: A.M.A. Arch. Surg. **79**:167-175 (Aug.) 1959.

Conscience in surgery means a strong sense of right and wrong, a willingness to help others, a feeling of compassion for the unfortunate, self-discipline, and a strong faith in the sanctity of God and man. It can be conditioned by education and experience. It depends not only on the surgeon's individual moral fiber and religious concepts, but also on his heritage of philosophic doctrines, his scientific and factual knowledge, and his judgment. It determines his conduct in many situations, such as the current difficulty with hospital-acquired infections, where temporary individual gains from the misuse of antibiotics may result in protracted trouble to a community. It compels the surgeon at times to resist popular demands and to have the moral courage to protest. It requires him to rise above the selfishness of small professional groups and to devote himself to the individual patient with gentleness, compassion, firmness and resolution. Many of the current problems concerning the care of the sick are complicated, not solved, by rigid regulations and dictatorial authority. Their solution depends, rather, on a rebirth of the surgical conscience.

Acute Dissecting Aneurysm of the Aorta

Julian R. Beckwith, William H. Muller, W. Dean Warren and J. Edwin Wood, Jr.: A.M.A. Arch. Int. Med. **104**:217-225 (Aug.) 1959.

Surgical correction of dissecting aneurysms of the aorta is now possible. The exact diagnosis of this condition is therefore more important than ever. The histories of 11 patients who underwent surgery have been analyzed in order to identify retrospectively the symptoms and findings most valuable in establishing the diagnosis. The most important was a history of severe pain which usually radiated to the back and frequently moved from its original location to another area; it was more severe than the pain of myocardial infarction and particularly significant in the absence of electrocardiographic abnormalities. Roentgenograms were of critical importance in nine of the 11 cases, especially in one instance when the aortogram showed a double-barreled lumen. A difference in the peripheral pulses was present in six cases. Systolic murmur, abdominal bruit and an abdominal mass occurred in less than half of the cases, but were helpful diagnostic points when they did occur. Four of the 11 patients survived surgery and did well after operation. Although the mortality in this series was high, the risks of allowing acute dissecting aneurysm to go untreated are so great that the authors advise prompt operation as soon as diagnosis is established.

■ Exhibits unusual analgesic properties, different from those of any other drug ■ Specific and superior in relief of SOMAtic pain ■ Modifies central perception of pain without abolishing natural defense reflexes ■ Relaxes abnormal tension of skeletal muscle

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■ More specific than salicylates ■ Less drastic than steroids

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SOMA has an unique analgesic action. It apparently modifies central pain perception without abolishing peripheral pain reflexes. SOMA is particularly effective in relieving joint pain. Patients say that they feel better and sleep better with SOMA than with previously used analgesic, sedative or relaxant drugs.
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ACTS FAST. Pain-relieving and relaxant effects start in 30 minutes and last 6 hours.

NOTABLY SAFE. Toxicity of SOMA is extremely low. No effects on liver, endocrine system, blood pressure, blood picture or urine have been reported. Some patients may become sleepy, particularly on high dosage.

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SUPPLIED: Bottles of 50 white coated 350 mg. tablets.
Literature and samples on request.

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Pharmaceuticals Today

Production and sales of medicinals in 1958 was reported on by the U. S. Tariff Commission during the month of August. The report showed the total output of medicinals (in bulk) in 1958 was 101.4 million pounds, or 2.6 per cent more than the output of 98.8 million pounds reported for 1957. Sales in 1958 totaled 81.4 million pounds. valued at $555 million, compared with sales in 1957 of 80.0 million pounds, valued at $576 million, an increase of 1.8 per cent in quantity and a decrease of 3.6 per cent in value.

The antibiotics as a group were the most important in 1958 in terms of values. Total production of all antibiotics for human and veterinary purposes in 1958 was 2.6 million pounds, with sales of 1.9 million pounds valued at $304.7 million. This was a decline of 5 per cent in quantity and 6 per cent in value compared with 1957.

The variance in the amount of drugs produced and those sold, also the variance in monetary value, point up several discussions that go on continuously about the pharmaceutical business: does sampling and advertising keep up the cost of drugs and are drugs unnecessarily expensive?

DRUG PRICE INDEX

A recent release by the Health News Institute gives the index of wholesale prices for drugs and medicines as 93.4 in June as compared to 93.9 in October 1958, and an annual 1958 average of 94.0. It points out that the index for all commodities was 119.6, up from 119 in October 1958. This uses the 1947-1949 period as 100.

This same release reports a controversy between the *New York Times* and a physician. The *New York Times* carried a story "Medical Man Calls Drug Price Too High" quoting a physician during the A.M.A. Atlantic City session. In an answer, which was acknowledged but not published, an article from *Today's Health* was quoted: "Our doctors learn of new products from scientific publications and meetings, and directly from the pharmaceutical house. This last means of communication, advertising to the doctor, is probably the least understood. It has often been said that drugs could be sold for much less if the cost of advertising were not added to the original cost of preparation. This fallacy should be dispelled.

"Most prescription drug firms spend an average of 5 per cent or less of the retail sales of a drug to inform your doctor of their product. If the cost of advertising were eliminated completely, a 50 cent capsule could be sold to you for about 48 cents. But this would eliminate the means necessary to produce mass sales, without which the cost of the same capsule could not have been brought down to the 50 cent selling price."

The article appeared in *Today's Health* in 1957 and the 5 per cent may not be applicable today, but the premise would still hold.

IS COMPETITION GOOD?

Competition in the drug industry often is discussed in connection with the price of the present day pharmaceutical. The following editorial in the March 1959 issue of the *Journal of the Medical Society of New Jersey* gives a definite opinion on this:

"More than 1,000 pharmaceutical companies manufacture drugs for our use. That means a lot of competition, jostling and dupication. Theoretically, it would seem smarter to consolidate these companies into a single drug-making unit that would save millions in overlapping costs and avoid duplication of effort. Yet if this were ever done, it would be a massive blow to public health. The competitiveness of the drug industry—which is a drag on the industry's profits—is a boon to our patients and to ourselves.

"The most dramatic effect of this competition is the way it keeps prices down. With all good companies making drugs that conform to standard, no one is going to buy Tradename X at 4 cents a capsule when Tradename Z sells for 2½ cents. So competition forces down the price, benefiting our patients. More than that, competition compels companies to search for different and better ways of preparing an item. If Company A has a patent on a process, Company B cannot get into the act unless its chemists find an equally good but basically different process. So competition spurs Company B's efforts to improve the technic; and Company A, anxious to remain in the running, redoubles its efforts. Then, too, competition rapidly makes drugs obsolete. If one manufacturer produces a fine antibiotic with only 3 side effects, his competitor works to manufacture one with no side effects. Result; the first antibiotic becomes as obsolete as tincture of gentian. This plays havoc with drug profits but it keeps the best pharmaceuticals in front of the shelves.

"Every good company competes with itself. One chemist sweats for years to manufacture a new drug only to see his colleague across the room make it obsolete by finding a better product. Then, too, competition prevents a company from becoming self-satisfied. No pharmaceutical manufacturer ever rests on his oars.

"So let Europe have its cartels, and Russia its state monopoly. We'll take a thousand fiercely competitive companies duplicating each other's efforts, driving each other's prices down, and striving mightily to win the blue ribbon of the most effective, least toxic drug of its kind. It is no coincidence that competitive American drug en-

(Continued on page 1305)

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AND ASSOCIATED ANXIETY
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including symptoms such as crying, lethargy, loss of appetite, insomnia

RELIEVES ASSOCIATED ANXIETY
with no risk of drug-induced depression

RELIEVES ASSOCIATED PHYSICAL TENSION
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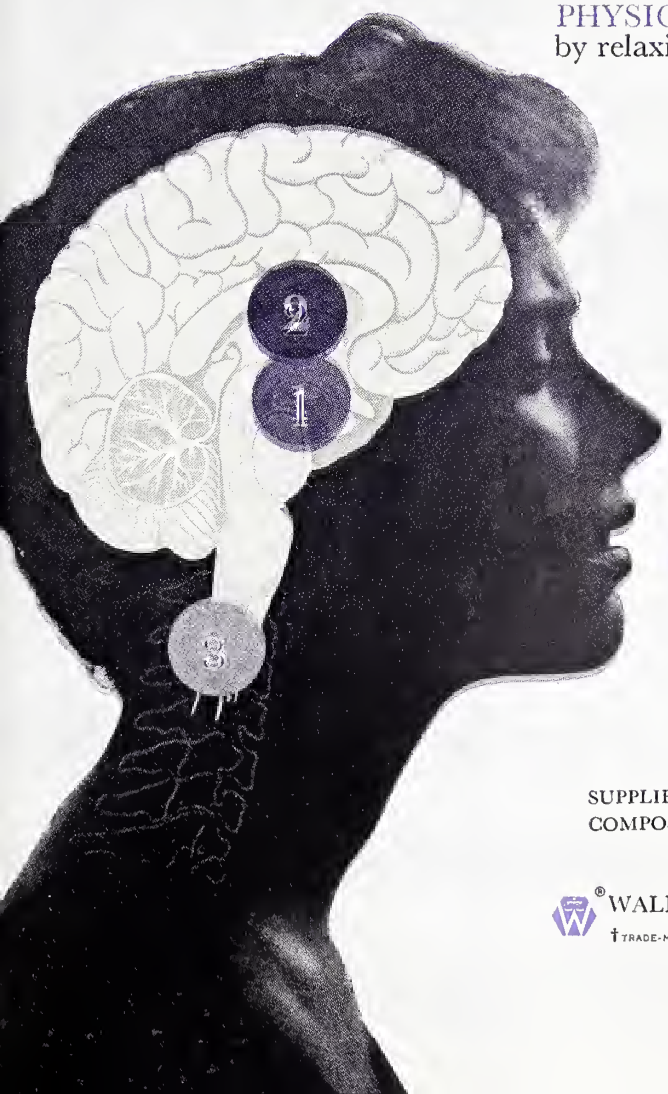

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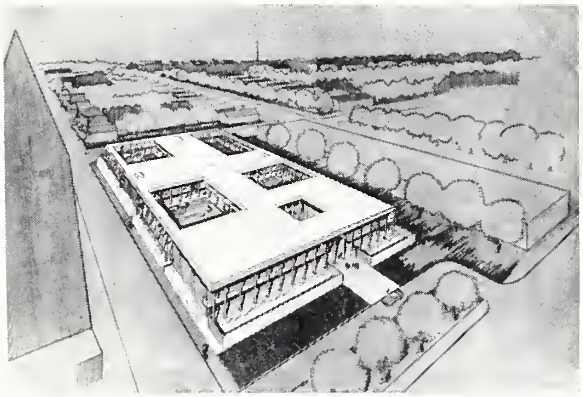
From the Medical Schools

SAINT LOUIS UNIVERSITY

David Wohl Health Institute

The construction of a $1,000,000 sixty-bed Health Institute at the Saint Louis University School of Medicine for the treatment and study of mental illness will get underway next year. The institute was made possible by a gift of $500,000 from David P. Wohl. Mr. Wohl's contribution was matched by grants under the Hill-Burton program for Missouri. Further support is pending under the Health Facilities Research Program of the U. S. Department of Health, Education and Welfare.



Artist's sketch of the two-story $1,000,000 David P. Wohl Health Institute to be constructed by Saint Louis University in the University's medical center.

Mr. Wohl's contribution was the first gift received by Saint Louis University in its 150th anniversary development program. The University is seeking $18,000,000 in the next five years and $46,000,000 in ten years.

The new addition to the Saint Louis University Medical Center will be known as the David P. Wohl Health Institute. It will be located on the northwest corner of Grand and Caroline avenues on the site of the Old National Guard Armory Building, which was recently purchased from the city by the University. Construction of the clinic is scheduled to begin early next year.

The hospital will fill an urgent need in the St. Louis area for facilities and professional personnel for the care of the mentally ill. It will also permit the development of the department of psychiatry and a consequent increase in teaching, research and psychiatric services for schools, social agencies, courts and other institutions.

In addition to the in-patient capacity of the institute, facilities will be available for 4,000 out-patient visits each year.

In thanking Mr. Wohl for his generosity, the Very Rev. Paul C. Reinert, S.J., president of Saint Louis University said: "Saint Louis University is deeply grateful for this generous and thoughtful gift which enables our School of Medicine to make such a significant addition to its capacity to alleviate suffering and to educate physicians to serve mankind. The David P. Wohl Health Institute is an important addition to our medical center and it helps our city maintain its splendid place in medical and health resources for the people. St. Louisans for generations to come will benefit from this grant. This splendid gift," Father Reinert continued, "is another instance of Mr. Wohl's great contributions in the community toward the improving of health and medical facilities available to the general public."

In gratitude to Mr. Wohl for leading the way in the University's five-year, $18,000,000 plan, Rev. Reinert said, "Mr. Wohl's generosity gives us renewed confidence that our goal will be achieved. Once again the city has reason to thank him for his warm heart."

The need for such a facility which will provide additional patient care and support a program of education for professional personnel in the field of mental health has been clearly stated by the American Public Health Association and the American Psychiatric Association in their recent survey of the health needs of St. Louis and Missouri.

The new building, which is unique in design, is essentially a University hospital with facilities for in-patient and out-patient service, teaching and research.

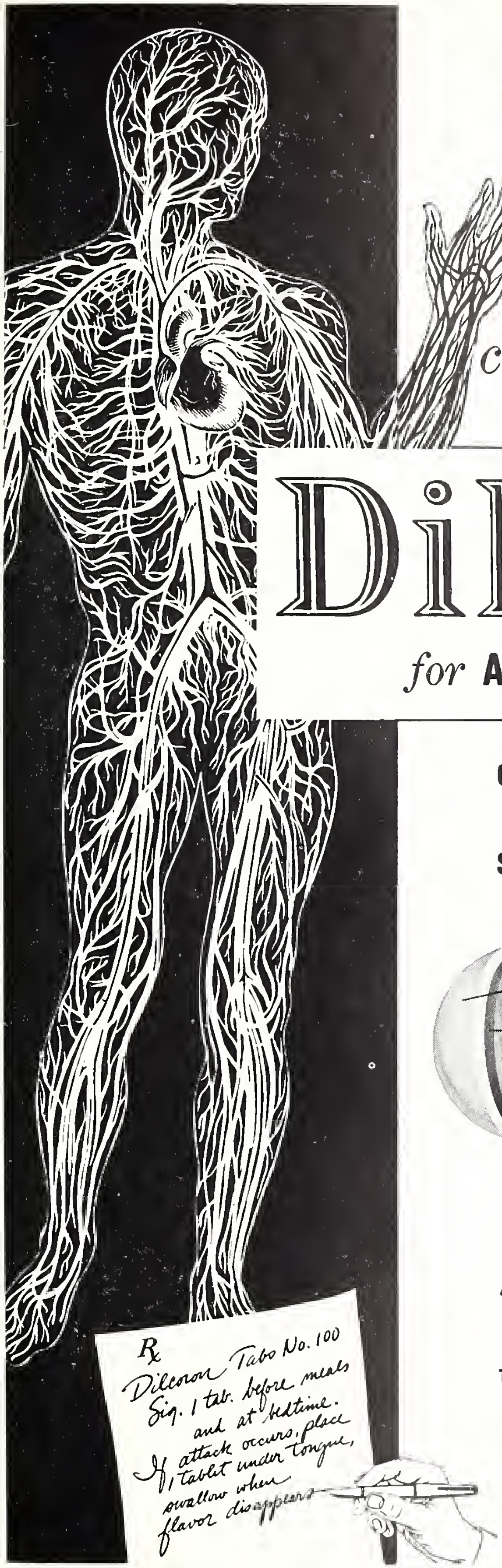
The plan is not only in accord with the demands of modern psychiatric treatment, but also looks to the future with its emphasis on attractive group living areas and openness of design difficult to achieve in the hospital's urban surroundings.

Dr. James W. Colbert, Jr., dean of the School of Medicine, described the building as a humanitarian hospital, which in its design is primarily directed to the comfort and service to the patient.

Because of the urban surroundings of the building, Dr. Colbert said, it was necessary to design a living community within the structure. This is accomplished by a series of functional living units which look upon courtyards within the hospital. There are three of these units, each with 20 beds. Each unit has its own courtyard and a two-story studio living room.

Purpose of this design, Dr. Colbert said, is to foster easy resocialization of patients. In this sense, the building itself is therapeutic.

In addition to the in-patient facilities, the building contains two stories of teaching, clinical and research space and an area for occupational and



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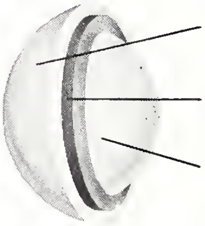

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recreational therapy. Office space, a classroom and library facilities are also provided.

The building will contain approximately 44,000 square feet and will have all the facilities of a mental hospital with the exception of laboratory, x-ray and certain other ancillary services which are provided by the nearby general hospital, Firmin Desloge. The construction is planned to permit future expansion upwards and outwards. Architect for the project is the St. Louis firm of Hellmuth, Obata and Kassabaum, Inc.

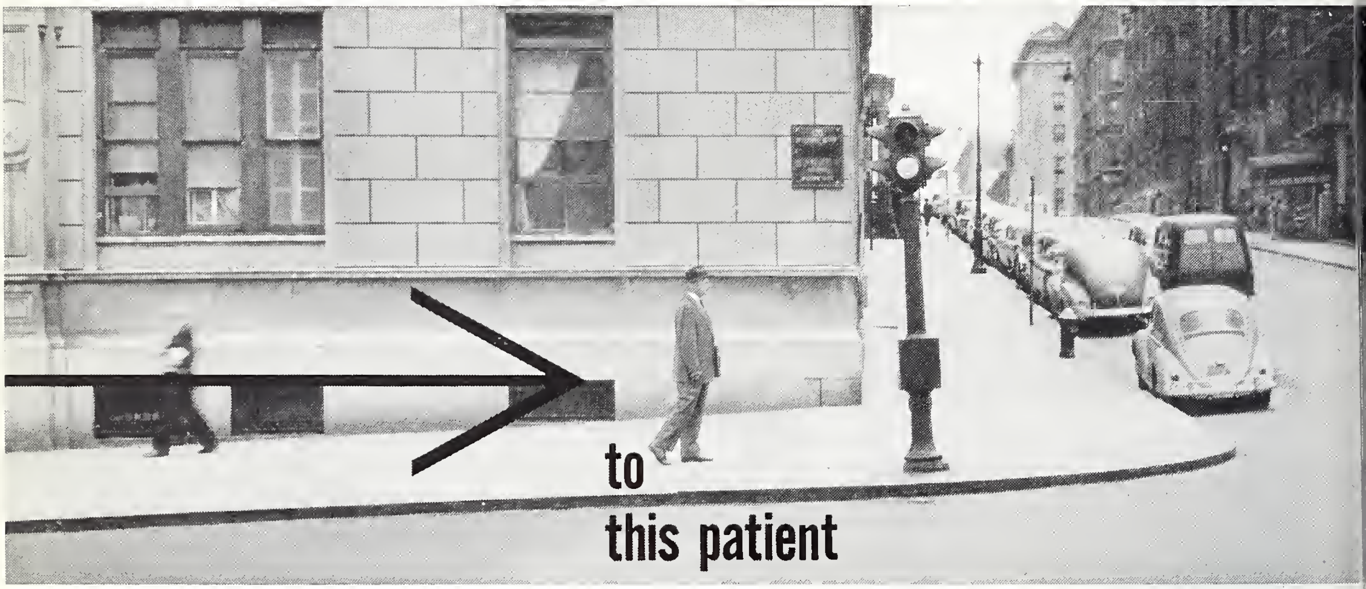
Election

Dr. William H. Elliott, professor of biochemistry, has been elected Chairman of the Missouri Section of the Society for Experimental Biology and Medicine. Dr. Elliott succeeds Dr. William F. Alexander, associate professor of anatomy at the University, who held the chairmanship for a two year period. Dr. Elliott automatically assumes membership in the council of the national society. He formerly served as the section's secretary. Dr. Xavier J. Musacchia, associate professor of biology, was elected a councilor. The object of the society is to cultivate the experimental method of investigation in the sciences of biology and medicine through meetings and scientific publications.

Meetings

Members of the Mississippi Valley Medical Society were invited to attend Grand Rounds at the Saint Louis University School of Medicine during the 24th annual meeting, which was held in St. Louis. Dr. Rene Wegria, professor of medicine and director of the department, presented Medical Grand Rounds at Firmin Desloge Hospital September 29. Dr. Vallee L. Willman, assistant professor of surgery presented Surgical Grand Rounds the same day. Interesting points of diagnosis and newer methods of treatment were discussed and patients presented.

Saint Louis University speakers in the scientific program held at the Chase Hotel included Dr. J. Gerard Mudd, director of the cardiac catheterization laboratories, who participated in a panel on pediatric heart problems, diagnosis and man-



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agement, medical and surgical. Dr. Willman panel participant, led a discussion on surgery of heart disease. Dr. Wegria was the moderator of a panel on diet, anticoagulants in heart disease and atherosclerosis. Dr. James Janney, Jr., associate professor of clinical medicine, also participated. Dr. J. Eugene Lewis, associate professor of clinical surgery spoke on diagnosis and management of surgical problems in the newborn. Dr. Robert M. O'Brien, chairman of the department of orthopedic surgery, moderated a symposium on highway injuries.

Scientific exhibits presented from Saint Louis University included one entitled "Studies of Sulfonamides in Prostatic Secretion" presented by Dr. Grayson Carroll, associate professor of clinical urology, and Dr. E. S. del Carmen, and an exhibit on "Hand Injuries" presented by Dr. F. X. Paletta, assistant professor of clinical surgery.

Dr. Ralph Bowers, chief of medical surgery, Veterans Hospital, Memphis, Tennessee, will deliver the annual Albert Kuntz Lectureship sponsored by the Phi Chi Fraternity October 30 at the Coronado Hotel. Dr. Bowers' lecture entitled "G-I Bleeding in Surgery" will be delivered at 8:00 p.m.

UNIVERSITY OF MISSOURI

New School Year

Seventy-five first-year medical students attended their first day of classes at the University of Missouri School of Medicine on September 17. This is the fourth class of 75 students to be accepted in the University of Missouri School of Medicine since it became a four-year medical school. There are presently 272 students enrolled in the School of Medicine.

Trips and Talks

Dr. Joseph E. Flynn, professor and chairman of the Department of Pathology, and Dr. Vincent P. Perna, assistant professor of pathology, attended a meeting of the American Society of Clinical Pathologists and College of American Pathologists in Chicago from September 5 through 11, during which Dr. Flynn participated in "Problems of

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PATHIBAMATE-400 and PATHIBAMATE-200 are indicated for duodenal ulcer; gastric ulcer; intestinal colic; spastic and irritable colon; ileitis; esophageal spasm; anxiety neurosis with gastrointestinal symptoms and gastric hypermotility.

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Administration and Dosage: PATHIBAMATE-400—1 tablet three times a day at mealtime and 2 tablets at bedtime.

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Adjust dosage to patient response.

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Pathology Involving Undergraduate, Graduate and Practitioners" and Dr. Perna participated as an instructor in a workshop on "Hormone Assay" and another on "Fluorescent Antibody Techniques."

Dr. Robert L. Jackson, professor and chairman of the Department of Pediatrics, attended a meeting in Jefferson City on September 10, sponsored by the Missouri White House Committee on Children and Youth, at which there were several committee reports presented and a discussion of the committee's future plans.

Dr. B. A. Westfall, professor and chairman of the Department of Physiology-Pharmacology, attended the Fall Pharmacology Meetings sponsored by the American Society for Pharmacology and Experimental Therapeutics. The meetings were held in Coral Gables, Florida, from August 30 through September 3.

Dr. D. K. Meyer, and Dr. W. S. Platner, professors of physiology and Mr. Jerry Critz, graduate assistant, attended the fall meetings of the American Physiological Society held in Urbana, Illinois, September 7 through September 11.

On September 10, Dr. Rodman Kabrick, assistant professor of clinical psychology, attended a meeting of the Division of Health of Missouri held at the Daniel Boone Hotel in Columbia, during which the planning of integrated health services for rural areas in Missouri was discussed with emphasis on mental health services. Dr. Kabrick also attended a meeting of the Boone County Child Welfare Advisory Committee held September 11, sponsored by the State Department of Welfare.

Dr. Theodore Keats, professor of radiology, attended the 2nd annual meeting of the Society for Pediatric Radiology held at Children's Hospital in Cincinnati, Ohio, and presented a paper entitled "Skeletal Cysts in Osteogenesis Imperfecta." The American Roentgen Ray Society held its meeting in Cincinnati, also, from September 22 through 25 and Dr. Keats presented a paper during this time entitled "Some Aspects of Cine and High Speed Serial Angiographic Techniques."

Dr. R. M. Jamison, assistant instructor and 3rd year resident in radiology, and Dr. Keats have published an article entitled "Supervoltage Roentgen Therapy" which appeared in the September issue of Missouri Medicine.

New Appointments

Mauricio Knobel has been appointed part-time clinical assistant professor of psychiatry effective September 1. Dr. Knobel received his B.S. in 1940 from National College "Julio A. Roca" in Buenos Aires and his M.D. in 1950 from the University of Buenos Aires Medical School. Dr. Knobel had been assistant clinical director in the Department of Child Psychiatry and Child Guidance Clinic of the Greater Kansas City Mental Health Foundation.

Clarence E. Thompson has been appointed assistant instructor and first year resident in surgery effective January 1, 1960. Dr. Thompson received his B.A. in 1948 from Friends University and his M.D. in 1953 from the University of Kansas. Since 1954 Dr. Thompson has been in private practice in Holyrood, Kansas.

WASHINGTON UNIVERSITY

Lecture, Visitor

Dr. E. Vincent Cowdry of Washington University School of Medicine was among three scientific investigators presenting research papers at the September dedication of the biological research laboratory recently completed at Springville, N. Y., by Roswell Park Memorial Institute, Buffalo. Dr. Cowdry, who is director of the Wernse Cancer Research Laboratory, discussed, "The Lure of Gerontology." Gov. Nelson Rockefeller was primary speaker during the dedication ceremony, which followed the scientific program. Facilities of the Buffalo Institute and its outlying laboratories are primarily devoted to cancer treatment and research.

Dr. Zeferino Vaz, dean of the University of São Paulo School of Medicine, Brazil, spent four days in September at Washington University School of Medicine in conjunction with a tour of various medical centers in the United States. He attended orientation day for freshman medical students at St. Albans, Mo.; spent one day with Dr. Robert E. Shank, Danforth professor and head of the department of preventive medicine and toured the departments of medicine and surgery with Dr. Carl V. Moore and Dr. Carl A. Moyer, respective heads of those departments.

New School

The first St. Louis public school for emotionally maladjusted children opened in September in the Washington University Child Psychiatry Clinics Building, 369 North Taylor. William Ferzacca, formerly director of the Jewish Community Centers' Association Nursery School, is instructing the youngsters, who are from 6 to 9 years of age. Ferzacca attended Michigan State University and received the master's degree in child development from Merrill Palmer School, Detroit, Michigan. According to Dr. E. James Anthony, head of the William Greenleaf Eliot Division of Child Psychiatry at Washington University School of Medicine, the type of child admitted to the school will be mainly those working grossly below their intellectual levels, children who have abnormal fears of going to school, those with special learning disabilities requiring intensive psychologic treatment that would normally take them away too long a period from their schools, and children who are pathologically shy and fearful and unable to hold their own in the social environment of an ordinary school. The Child Development School is located in the Mission Free School building, use of which has been donated to the University to house the Child Guidance Clinic, a United Fund Agency; and the Child Evaluation Clinic, which is supported by its treatment. Recently, however, tuberculosis has

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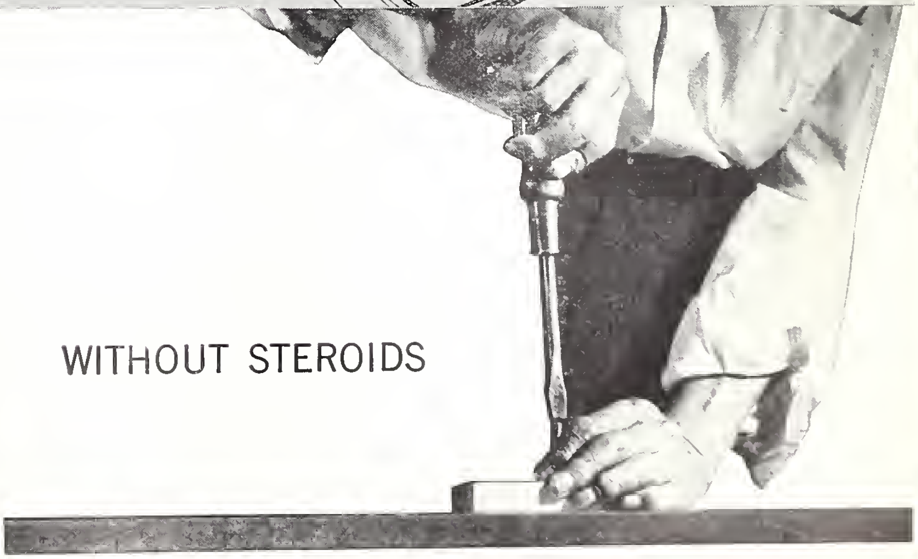
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School equipment and the teacher have been furnished by the St. Louis Board of Education.

Appointments

Dr. Roy M. Mendelsohn has been named director of the Child Guidance and Child Evaluation Clinics at Washington University School of Medicine. Both Clinics are units in the new William Greenleaf Eliot Division of Child Psychiatry which opened in April at the former Mission Free School, 369 North Taylor Avenue. Dr. Mendelsohn received the medical degree from the University of Illinois College of Medicine in 1952 and served his internship year at South Chicago Community Hospital. From 1952 to 1955 he received specialized training at the Menninger School of Psychiatry, Topeka, Kan., assigned to Winter Veteran's Administration Hospital and Southard School for Children. He served as staff psychiatrist at Veteran's Administration Hospital, St. Cloud, Minn., from 1955 to 1957, returning to Southard School for fellowship training from 1957 until July of this year. Dr. Mendelsohn, his wife and four children live at 45 Hanley Downs, Richmond Heights.

Visiting professors for the 1959-60 academic year are Dr. J. Harold Burn and Dr. Graham Weddell, both members of the medical faculty at the University of Oxford. Dr. Burn, who has been at the University of Oxford since 1937, is visiting professor of pharmacology, and Dr. Weddell, who was appointed fellow and medical tutor of Oriel College, University of Oxford, in 1947, is visiting professor of anatomy.

Dr. David B. Allbrook of the Student Health Service, College of East Africa, has been appointed visiting associate professor of anatomy.

Named permanent assistant professors on the medical school staff are Dr. Alexander Margulis, department of radiology, and Dr. Paul Horowicz, department of physiology. Dr. Margulis has been chief of radiology, Womack Army Hospital, Fort Bragg, N. C., since 1957. Before that, he was assistant professor of radiology at the University of Minnesota. Dr. Horowicz has been on the staff of Johns Hopkins University since 1957.

Grants

One year study grants totaling $55,254 have been awarded to Washington University by the American Cancer Society. Dr. William J. Harrington, associate professor of medicine, received $17,245 to continue study of basic biochemical abnormalities in leukemia. The University received a $38,000 renewal of an Institutional Research grant. The award is designed to stimulate interest and participation in programs of research related to cancer on a broad university-wide basis.

TUBERCULOSIS ABSTRACT

Tuberculosis and the Family Physician

The family physician traditionally has played a larger role in the diagnosis of tuberculosis than in become a much more manageable disease, and the need for long-term institutional care has been sharply curtailed. Even if one agrees that almost all cases of tuberculosis are to be hospitalized at the beginning, the family physician can and should take a larger part in the treatment and clinical management of these patients than he has in the past.

Tuberculosis still is not an easy disease to treat nor is the treatment routine. There are many varieties of tuberculosis. It is not enough to identify the location of tuberculosis lesions, but one must also know whether these lesions consists predominantly of inflammatory elements or whether necrosis is advanced and cavitation is present and to what extent reparative changes already have taken place. Prognosis in the antimicrobial era depends more on the duration of tuberculous disease before treatment is started than on its extent. If treatment is prompt and adequate in the early stages of acute cases, one can expect almost complete resolution of pneumonic patches and prompt closure of even large cavities.

In hospitalized patients strict bed rest appears to be unnecessary. In severe tuberculosis with acute symptoms it is more important to begin drug treatment promptly than it is to have the patient admitted promptly to a hospital. This assumes that the diagnosis has been confirmed and that the drug regimen selected is adequate. But unless the patient is markedly prostrated and debilitated or has hemoptysized, he does not require strict bed rest or much nursing care. Rather, it is for the protection of his contacts and of the public and for other ancillary objectives that a period of hospitalization usually is advisable.

DRUG REGIMEN

An adequate drug regimen for initial treatment should include isoniazid, the most potent of the available therapeutic agents. This may be coupled with either streptomycin or para-aminosalicylic acid (PAS). The use of two drugs is customary, although there is evidence that in noncavitary pulmonary tuberculosis and in certain types of extrapulmonary tuberculosis isoniazid alone is adequate. PAS is the more commonly used companion drug, but in miliary or meningeal tuberculosis and in severe pneumonic forms, streptomycin, the most potent drug, is available. If streptomycin is used, it should be given daily, in doses of 1 gm. intramuscularly, at least during the first month or two. Regular streptomycin, rather than dihydrostreptomycin, is the drug of choice because of the considerably greater auditory toxicity of the dihydro derivative. The usual oral dosage of isoniazid is 5 mg. per kg. per day or for adults an average of 300 mg. total daily dose, divided in two or three individual doses of 150 the St. Louis Association for Retarded Children.

Issued by the National Tuberculosis Association.
Carl Muschenheim, M.D., *New York State Journal of Medicine*, December 15, 1958.

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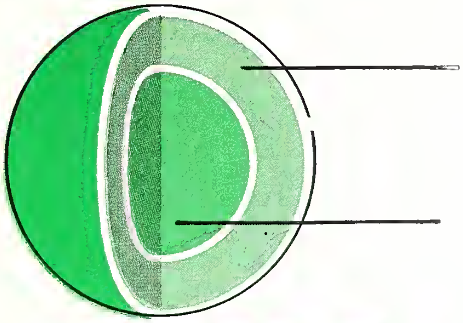
the diagnosis: any one of several nonspecific gastrointestinal disorders requiring relief of symptoms by sedative-antispasmodic action with concomitant digestive enzyme therapy. **the prescription:** a new formulation, incorporating in a single tablet the actions of Donnatal and Entozyme. **the dosage:** two tablets three times a day, or as indicated.



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Atropine sulfate	0.0097 mg.
Hyoscine hydrobromide	0.0033 mg.
Phenobarbital (1/8 gr.)	8.1 mg.
Pepsin, N.F.	150 mg.

in the enteric-coated core:

Pancreatin, N.F.	300 mg.
Bile salts	150 mg.

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mg. or 100 mg. PAS usually is given orally in a total daily dose of 12 gm., divided in three or four individual doses with meals. Children tolerate these drugs better than adults do and may receive larger proportionate doses.

In most forms of tuberculosis, surgery is rarely necessary, at least until after several months of conservative antimicrobial therapy. Progress in pulmonary tuberculosis should be gauged adequately by periodic chest films and regular sputum or gastric cultures at monthly intervals. If clinical progress is satisfactory, it is best to adhere to the same drug regimen despite any in vitro evidence of drug resistance.

TOXICITY OF DRUGS

Changes in therapy are most often dictated by manifestations of drug toxicity. Isoniazid is the least frequent offender, PAS the most poorly tolerated because of gastrointestinal disturbances, and streptomycin the most carefully to be watched because of the potential serious damage to the eighth nerve and because of its potential nephrotoxity as well. Streptomycin should not be used in full dosage when there is any evidence of reduced kidney function, or in the elderly except for most compelling indications. Sometimes it is necessary to have recourse to the second line of antituberculous drugs, which include viomycin, cycloserine, and pyrazinoic acid amide. These may be useful in older, previously treated, chronic, inoperable cases.

In the initial course of treatment, it is now usually possible to bring the case to a successful outcome provided (1) the drug therapy is uninterrupted, (2) any ancillary surgical procedures be performed at the proper time, and (3) the drug therapy is continued for a sufficiently long time. The duration of therapy should never be less than one year, and for most types of tuberculosis it should be up to two or three years. Treatment with isoniazid alone is usually sufficient after the first year or six months after surgery if bacteriologic conversion of body secretions, such as sputum, gastric washings, or (in the case of renal tuberculosis) the urine, has been attained. Healing or surgical excision of open lesions also should have taken place before the drug therapy is simplified to the single drug, isoniazid.

It is clear from this outline of a therapeutic program, that most newly diagnosed cases can be managed for the greater portion of the period of active treatment outside of hospitals. The initial period of hospitalization will rarely need to be for longer than six or eight months, and often a few weeks will suffice.

SURGERY

The salient fact which has emerged in the last few years is that the indications for surgery in tuberculosis are diminishing. The incidence of relapse following successful and long-continued medical therapy is proving to be remarkably low. The results of conservative treatment of renal tuberculosis have been so successful that the indications for nephrectomy in this disease can with little justification be considered absolute or urgent. Only in renal tuberculosis is there any evidence that simultaneous administration of all three standard drugs (isoniazid, streptomycin, and PAS) is advantageous.

The policy of deferring surgical procedures on the treatment of bone and joint tuberculosis until after several months of chemotherapy is becoming increasingly important. In other "surgical" forms of tuberculosis, such as the tuberculosis of superficial lymph nodes, the surgery is best delayed in most cases.

From the foregoing outline it is evident that much of the responsibility for the therapeutic program must increasingly fall on the family physician. What tools will the family physician need beyond those he can provide in his office? He will need to have access to all the tools which now are provided in tuberculosis hospitals. He will need to have a cooperative liaison with inpatient hospital services. Coordination between the hospital and home phases of management is essential.

The communicability of tuberculosis is still a paramount consideration. Tuberculosis never can be treated casually or without regard to the health of others. The relationship is in its very essentials not merely between the physician and the patient but between these two and the entire community.

Missouri Medicine in Review

Leo H. Pollock, M.D.

FORTY YEARS AGO

The St. Louis Medical Society and the St. Louis Pediatric Society have invited the American Child Hygiene Association to hold its 1920 meeting in St. Louis.

Leo H. Pollock, M.D.

The fall meeting of the Southwest Missouri Medical Society held its session at Springfield, October 23 and 24, under the presidency of S. W. Cassville. A postgraduate meeting was held on October 22.

The forty-third semi-annual meeting of the Southeast Missouri Medical Association met at Cape Girardeau, October 21-23. Dr. F. B. Hall of St. Louis is president of the Association.

Officers of the State Board of Health believe that an outbreak of typhoid in Concordia, Sweet Springs and other towns in that vicinity, resulted

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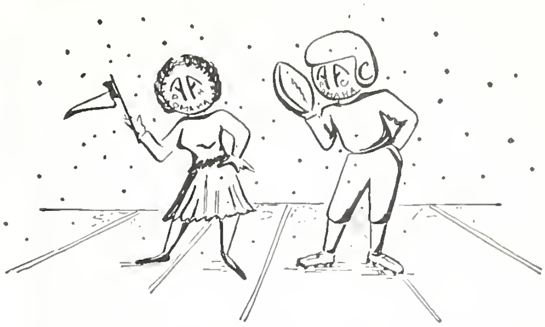

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from the use of ice taken from ponds that had been contaminated by neighboring cesspools.

Ten per cent of all prisoners arrested in St. Louis are feebleminded, according to Dr. J. E. Wallen, chief of the Public School Clinic of St. Louis. He says 649 pupils in the public schools have been found feebleminded and 532 mentally deficient. He advocates increasing the amount for a municipal farm from $900,000 to $1,500,000 to be included in the proposed $22,000,000 bond issue.

During the meeting of the Military Surgeons at St. Louis, October 15, the St. Louis Medical Society had the privilege of hearing Dr. William F. Snow, Lieutenant-Colonel, Medical Corps, U. S. Army, and Dr. R. L. Russell, Director of Venereal Diseases of the Missouri State Board of Health.

Dr. H. S. Hill of Springfield has presented his medical library to the Greene County Medical Society. After a half century of active practice Dr. Hill, who is 76 years old, feels that he is entitled to slacken his pace somewhat and therefore he will not need all the books he has accumulated. This is the second donation of medical works received by the Greene County Medical Society, the late Dr. H. L. Porter of Seneca having directed that his medical library be given to that society.

The regular meeting of the Buchanan County Medical Society was held at the Commerce Club Rooms, October 1, 1919, with the president, Dr. A. B. McGlothlan, in the chair. Seventeen members were present.

The Gasconade-Maries-Osage County Medical Society met in the Public Hall in Red Bird, on Thursday, October 9, 1919, Dr. M. E. Spurgeon, president. The following doctors were present: M. E. Spurgeon, J. J. Ferrell, John B. Underwood, C. A. Binge, John D. Seba, and I. M. Owens.

The Scott County Medical Society met at Illmo and elected officers for 1920 as follows: President, L. S. Mayfield, Illmo; vice president, G. S. Cannon, Fornfelt; secretary and treasurer, E. J. Neinstedt, Blodgett.

TWENTY-FIVE YEARS AGO

Medical education will lose the official support of an ardent friend in December when Walter Williams relinquishes his office as president of the University of Missouri to a younger man and returns to the field of journalism. Missouri doctors familiar with Walter Williams' activities, will recall that, while chairman of the Board of Curators of the University of Missouri more than a quarter of a century ago, he was instrumental in the bringing about of a first-class complete course in medicine in the University. One of his first tasks was to reinstate the four-year course in the school of medicine, which he undertook in the face of the depression. He succeeded in reestablishing the four-year course and had appointed a faculty adequate to carry the additional burden of clinical and classroom instruction only to be faced with a serious lack of funds. Reluctantly he permitted the third and fourth year courses to be removed until a time when funds would be sufficient to restore the full curriculum.

Dr. Walter Baumgarten, St. Louis, has been appointed a member of the Committee on Publication of the State Association by the President, Dr. C. T. Ryland, Lexington. Dr. Baumgarten will succeed Dr. M. A. Bliss, St. Louis, who died September 4.

Dr. J. F. Bredeck, St. Louis, was elected president-elect of the Missouri Public Health Association at the annual meeting of the association in St. Louis, September 20 and 21. Dr. J. T. Brennan, Independence, was installed as president. The 1935 session will be held in Kansas City.

The fourteenth annual meeting of the Southwestern Branch of the American Urological Association convened in St. Louis, October 22, 23 and 24. The program was dedicated to Dr. Bransford Lewis, St. Louis, in honor of his fiftieth year in the practice of urology. Addresses were delivered before sessions at the Coronado Hotel and clinics were conducted at hospitals. Missouri members appearing on the program were Drs. Neil S. Moore, S. M. Tapper, Grayson Carroll, D. K. Rose, John R. Caulk, George Ives, C. E. Burford and Bransford Lewis, St. Louis; C. K. Smith and Ernest G. Mark, Kansas City, and Charles Greenberg, St. Joseph. Dr. Grayson Carroll, St. Louis, presided at the St. Louis Session.

TEN YEARS AGO

Lloyd Stockwell, M.D., Kansas City, has been appointed a member of the scientific exhibits committee for the annual meeting of the American Urological Association in Washington, D. C., May 29 to June 1, 1950.

The Missouri Society of Pathologists will have its first official meeting in Columbia on October 21 at the Daniel Boone Hotel beginning with a dinner at 6:30 p.m. Edward H. Reinhard, M.D., St. Louis, will speak on "Chemotherapy of Malignant Disease." Officers of the society are M. Pinson Neal, M.D., Columbia, president; Russell W. Kerr, Kansas City, president-elect; Henry C. Allen, M.D., St. Louis, secretary.

The St. Louis County Medical Society held its regular meeting on October 12, at 8:30 p.m., in the Health Center, St. Louis County Hospital. Chairman of the radio committee reported that Station KXLW was discontinuing the society radio programs because of insufficient personal interest by members of the society. On motion of Dr. Koch, the president was authorized to appoint a committee to investigate the purchase of a 16 mm. projector, or other suitable gift, from the society to the St. Louis County Hospital.

Pharmaceuticals Today

(Continued from page 1284)

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DRUG COSTS IN ENGLAND

And in other countries, according to the final report of the Hinchliffe Committee, the total cost of the drug bill of the National Health Service in England and Wales has doubled in the last nine years. Making allowance for the fall in the value of money, there is an increase of about 45 per cent. The cost of the average prescription has risen from 43 to 84 cents, and the average cost of drugs per patient a year has risen from $2.27 to $4.20.

BOOK REVIEW

A Method of Anatomy Descriptive and Deductive, by J. C. Boileau Grant, M.D. (Edin.) Professor Emeritus of Anatomy in the University of Toronto and Curator of the Anatomy Museum. Sixth edition. The Williams & Wilkins Company, Baltimore, 1958. Price $11.00.

When a new volume appears on the library shelf, it frequently is compared with tomes under the same Dewey decimal classification. The newcomer at hand can be compared with a classic. In 1858 Henry Gray published a manuscript concerning human anatomy. It has been a standard text for over a century and is now in its 27th edition, which may be considered a substantial recommendation for any book. There are needs for other types of anatomy texts but it is logical to compare them with one which has stood the test of time.

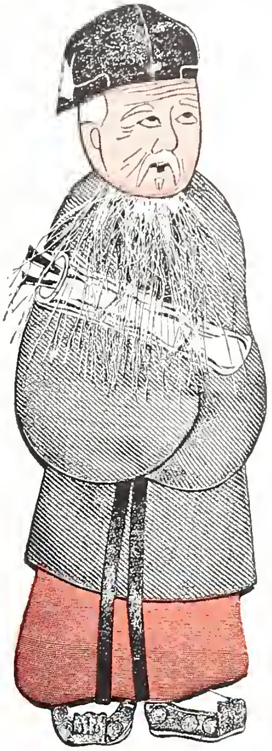
The book under consideration is presented in an easy flowing style in contrast to the more formal, diactic approach of Gray. It reads well for someone already familiar with the subject. In this respect such form may be good for the older student in need of a review—i.e., "for boards." Its value may be questioned, however, for the more demanding student or the one requiring detail.

The descriptive findings run too loosely at times when more fixed landmarks are required. Organ systems often are not presented in even sequence. The illustrations throughout the text are schematic drawings. Furthermore, they contain no color contrasts which would be helpful in making an indelible impression on the reader. To my way of thinking, the near photographic reproductions of body parts and the multicolored plates of Gray are more functional.

In conclusion, this text may be used in supplementary fashion but it is not a basic unit.

G. N. B.

immortals of chinese mythology:



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References: 1. Lhotka, F. M.: Illinois M. J. 112:259 (Dec.) 1957. 2. Fabricant, N. D.: E.E.N.T. Monthly 37:460 (July) 1958. 3. Farmer, D. F.: Clin. Med. 5:1183 (Sept.) 1958. 4. Bonica, J. J.: in Drugs of Choice, Mosby, St. Louis, 1958, p. 272. 5. Dascomb, H. E.: in Current Therapy, Saunders, Phila., 1958, p.78. 6. Bickerman, H. A.: in Drugs of Choice, Mosby, St. Louis, 1958, p.547.

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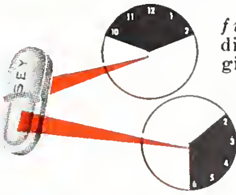

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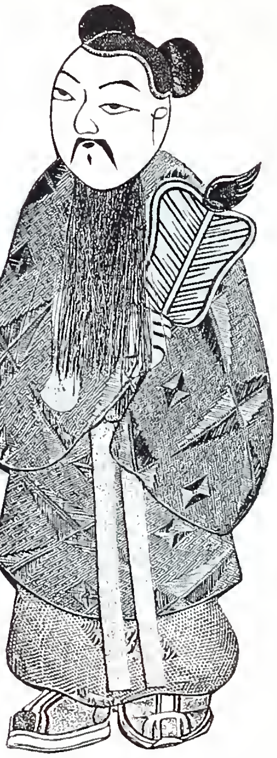

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BOOK REVIEW

Childbearing Before and After Thirty-Five, by Adrien Bleyer, M.D., Associate Professor Emeritus of Clinical Pediatrics, Washington University School of Medicine, St. Louis, Missouri. Introduction by Dr. Richard L. Jenkins, Director, Psychiatric Evaluation Project, U. S. Veterans Administration, Washington, D. C.; Commentary by Dr. Douglas P. Murphy, Associate Professor of Obstetrics and Gynecology, Gynecean Hospital Institute, University of Pennsylvania, Philadelphia. Vantage Press, New York, 1958. Price $2.95.

This concise monograph on the risks of bearing a defective child is drawn from the studies of many investigations, and is useful to anyone advising parents-to-be.

Although 200,000 defective children are born annually, women 20 to 24 years of age have contributed the smallest number to this defective group. After 30 years of age the risk increases significantly, as one third of American children are born to women over 30. The author feels this risk is due principally to the increasing number of imperfectly maturating ova with the increasing age of the woman. The age of the male, fortunately, has little to do with the vigor of the individual spermatozoon.

The author noted that closely following abortions, premature infants and stillbirths, the ovum sometimes appears to be defective and advises postponing pregnancy for a time after such births. Intervals between normal infants seem to have no bearing on deformities, nor does the birth order or the total number of siblings. The likelihood of a mother, who has borne one defective child, having a second defective offspring, during the years immediately thereafter, is 24 times greater than in families of the population at large.

The defects found seem to be selective and frequently can be duplicated in relatives. Among the defects mentioned are: mongolism, imbecility, dwarfism, congenital heart, psychoses, prematurity, stillbirth and neonatal death.

In addition to ovary changes with advancing years, the following defects increasingly appear with age: hypertension, toxemia, obesity, diabetes, oversize babies, placenta previa, cesarean section and ruptured uterus.

Dr. Willard Allen is of the opinion that "young women should marry and have children while they are still young rather than defer marriage until financial security is achieved, passions lost, and married life becomes platonic rather than torrid."

The author states of some women, that even at the age of 50 the prospects of bearing normal children are still impressive, and older parents-to-be can offer security far outweighing risk of defects.

In support of this statement, Dr. Bleyer reminds us that "Sarah bore and nursed a son for Abraham at the tender age of 94."

W. W. P.

Curiosa et Trivia

William B. McCunniff

So-so successful pastel artist, Renoir, had to abandon this medium when his advancing arthritis made it impossible to hold the pastel sticks. Using brushes tied to his fingers, though, he turned out some of his finest works.

Wheezy department store janitor, asthmatic James Spangler, found his asthma much worse when exposed to dust raised by brooms. His homemade cleaner lessened the amount of flying dust. Finally convincing leather-goods manufacturer, W. H. Hoover, of the virtue of his invention, a corporation was formed to manufacture the first vacuum cleaner.

Russian physician, Anton Chekhov, wrote between 700-800 stories in his lifetime, along with many plays. This remarkable record, for a well man, was attained in spite of serious illness. Refusing medical examination for recurrent hemoptysis, hemorrhoids, convulsions, and depression, he died from massive pulmonary hemorrhage. His body was returned to Moscow in a refrigerator car marked "For the Conveyance of Oysters."

Capsule Clinics

- Diamox is a useful agent in the control of fluid retention in pregnancy. Flowers, Am. J. Obst. & Gynec. **75**:1180, 1958.
- More C^{14} labeled atropine enters the eye following topical installation (provided the cornea is covered with the material) than when similar amounts are given subconjunctivally. James, R. G., and Stiles, J. F., Arch. Ophth. **62**:69, 1959.
- Feeding regimens that provided all or nearly all protein in the form of human milk were in no way superior to those in which 40 to 45 per cent of protein was provided from soybean food. Fomon, S. J., and May, C. D., J. Dis. Child. **98**:6, 1959.
- Antipruritic agents in common use were ineffective in relieving experimentally induced itching. The antipruritic effect of such agents is probably psychological. Macris, S. G., et al., J. Invest. Dermatol. **33**:15, 1959.
- The histologic and serologic patterns in prematurity and spontaneous abortion are almost identical. The difference is one of degree and accounts for the end results in any given case. Gray, J. D., et al., Am. J. Obst. & Gynec. **78**:325, 1959.

From Clinical Clippings, the Francis Roberts Agency, Inc.

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WASHINGTON

DR. ORR PREDICTS

Louis M. Orr, M.D., President of the American Medical Association, in an address "Uncle Sam With a Stethoscope" before the Association of Life Insurance Medical Directors, October 22, predicted that the proponents for the Forand Bill may try all or any of the following in order to establish the principles of government paid service benefits to the social security program which, so far, has been limited to cash payments:

They may be ready to accept compromises that will water down the bill.

They are chiefly interested in establishing a precedent, no matter how small, for government-financed health care of the aged.

By using the tactics of "divide and conquer," they will try to prevent the American Medical Association from establishing a united front with the insurance industry, the Blue Plans and the American Hospital Association.

To disarm physicians, and lessen the intensity of their opposition, the bill may be amended to cover only hospital and nursing home care.

Every effort will be made to dilute the plan so as to make it more palatable to the hospitals. This strategy may include the suggestion that Blue Cross serve as the fiscal agent for any Social Security hospitalization plan.

To disarm those who are concerned over the potential cost of the Forand Bill, the age of eligibility may be raised to 70 as a starter.

CHAMBER OF COMMERCE TAKES STAND

The United States Chamber of Commerce and two key Congressmen, all opponents of the Forand Bill, recently issued separate warnings that an all-out effort will be made to get the controversial legislation through Congress next year.

In its weekly report to members, the Chamber predicted that there will be "a powerful attempt" in the next session of Congress to enact the bill which would increase social security taxes to help pay for the cost of the federal government providing surgical and hospital care for social security beneficiaries.

The Chamber warned that passage of the legislation would make "a major break-through into the welfare state." It "probably would lead to a compulsory federal program providing complete medical care for everyone," the Chamber said.

The Chamber called upon communities to find orderly solutions to the problems of the aging. Otherwise, solutions "will surely be imposed from Washington."

REPRESENTATIVES EXPRESS VIEWS

Thomas B. Curtis (R., Mo.) and Richard M. Simpson (R., Pa.), both key members of the house Ways and Means Committee where the bill was shelved last session, have given similar warnings.

Representative Curtis urged that the medical profession and other leading opponents make a strong counter drive in an all-out effort to block passage of the bill next session. Unless there is such action, he said he would have to "regretfully" predict that legislation along the lines of the Forand Bill probably will be enacted in 1960.

Representative Simpson said that H. R. 4700, and similar legislation affecting the medical profession, "make it imperative that every doctor keep informed on legislative issues before Congress." He also urged that physicians "become patriotic political forces" by giving "their informed viewpoint" to lawmakers at all levels of government. Representative Simpson said that it is important that opponents of the Forand Bill develop appropriate alternatives to solve the health care needs of the aged. He promised to continue to cooperate with the medical profession to guard "against the disastrous consequences of compulsory national health insurance."

KEOGH-SIMPSON BILL

House Democratic Leader John McCormack of Massachusetts has expressed hope that Congress next year will give final approval to the Keogh-Simpson bill. He said it was meritorious legislation and said he thought it should be enacted next year.

PARTNERSHIP PROGRAM PROPOSED

A National Republican Committee on "Program and Progress" has proposed a far-reaching health program to be carried out by the federal government in partnership with states and local governments.

Its goals would include enlarging the capacity of medical schools so that 3,000 more doctors could be graduated each year, providing more hospital and nursing home beds and supplementing hospital facilities with clinics, day-care centers and more visiting nurses to care for patients in their own homes.

The Committee proposed a five-point partnership program: (1) short-term federal aid for construction of medical school buildings, (2) changes in the present hospital construction program to encourage renovation and repair of outmoded hospitals, (3) federal guarantees for mortages to finance construction of private nursing homes on a basis assuring high standards of quality in construction and operation, (4) encouragement of construction of diagnostic and outpatient facilities in rural areas and the building of mental health clinics, and (5) federal aid to cities in more effective planning and coordination of health services.

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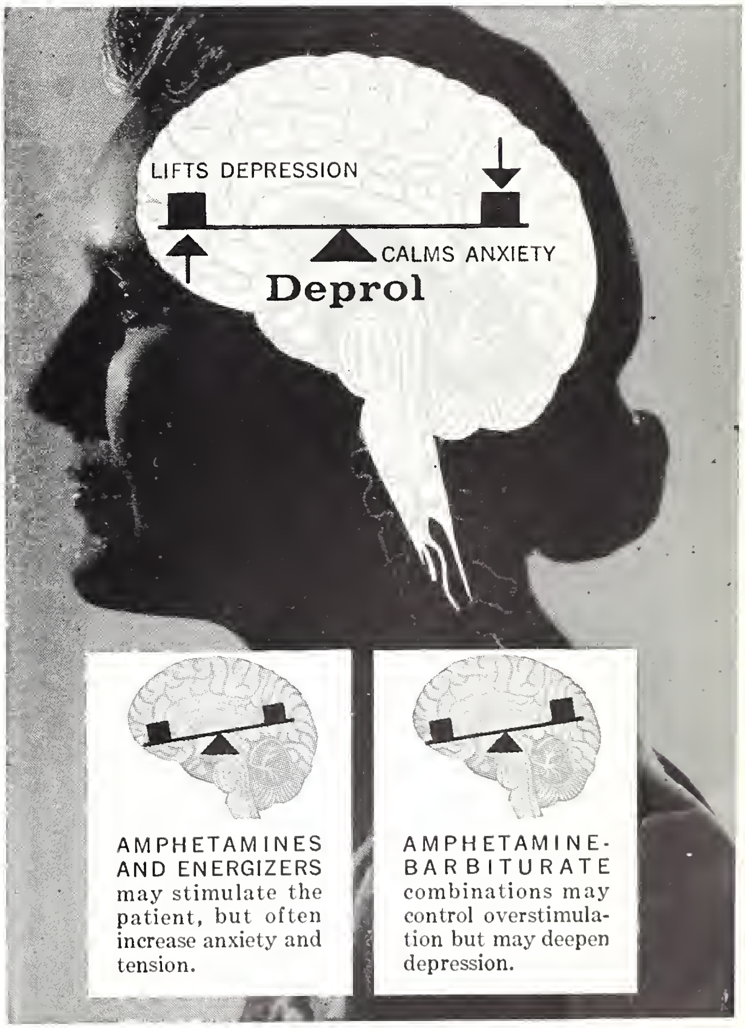

AMPHETAMINES AND ENERGIZERS may stimulate the patient, but often increase anxiety and tension.

AMPHETAMINE-BARBITURATE combinations may control overstimulation but may deepen depression.

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Across Missouri

GROUNDBREAKING FOR MENTAL HEALTH

Missouri will rank among the top programs in mental health within 10 years was the prediction of Governor Blair when he took part in groundbreaking ceremonies for the St. Louis State Hospital's new $5,200,000 clinic and administration building in St. Louis in October.

Mr. Francis Smith, St. Joseph, chairman of the State Mental Health Commission, paid tribute to the work and interest of several individuals, including Governor Blair. Mr. Smith said "Even though, relatively speaking, we are in a deplorable position in the mental health field, we would have nothing in Missouri were it not for men like Dr. Louis Kohler and Dr. Emmett Hoctor and some others who have labored with almost no money and few physical facilities."

Governor Blair pointed out that the new mental health program "had its start in the Legislature because of their understanding and their willingness." The Governor said that the mental health program is one of the things he will be most proud of in his administration.

PRISON CONDITIONS TO BE IMPROVED

It is expected that the new medium security prison to be located in Moberly will be underway by the end of this year. It should be completed in 1962. Another change in the prison set-up is the opening of a diagnostic center in the penitentiary at Jefferson City. In the past, new prisoners between the ages of 17 and 25 were sent to the Algoa intermediate reformatory and all others to the penitentiary. Now, all prisoners will go directly to the penitentiary for processing and assignment. Each man will undergo thorough physical and mental tests. From the center, the men will be assigned to the penitentiary, Algoa, a prison farm, or, when it is completed, the medium security prison.

The purpose is to separate the young prisoners and many first offenders from the more hardened offenders and to place each man in the environment that offers the best chance of rehabilitation.

LAST HAND-SET NEWSPAPER IS CONVERTED

Missouri no longer has a hand-set weekly newspaper. For many years the *Richland Mirror* held the distinction of being the last hand-set weekly in the state. With recent sale of the paper, a linotype was installed.

HOSPITALS GET GRANTS

Missouri hospitals have been approved for grants totalling $3,820,105 toward construction of additional facilities. The matching money is supplied by the federal government under the Hill-Burton hospital program.

One grant of $830,400 will go to various hospitals for completion of expansion projects already underway.

St. John's Hospital in St. Louis got three grants, one for the mental patient facilities, one for chronic disease beds and one for a nurses' school and residence.

For additional general patient beds, money will go to the Missouri Delta Hospital in Sikeston, the Smithville Community Hospital, Howard County Hospital in Fayette, and the Sullivan Memorial Hospital.

Malcolm Bliss Hospital will add mental patient beds and the Homer G. Phillips Hospital in St. Louis will add diagnostic and treatment centers.

EMPLOYMENT FIGURES DOWN

Missouri's total nonagricultural employment fell 1,300 jobs from the 1,287,600 recorded in mid-July to 1,286,300 at mid-August. The downward trend of employment resulted from losses in the production of durable goods with the primary metal industries responsible for a loss of 2,600 workers due to the steel strike.

However, a year-to-year comparison made by the Missouri Division of Employment Security showed an increase of 17,400 workers from August 1958 to August 1959. Manufacturing with an increase of 11,400 jobs accounted for approximately 65 per cent of the gain in total nonagricultural employment. The durable goods industries with an increase of 10,200 workers accounted for 90 per cent of the manufacturing industries gain.

CHILDREN TO GET MENTAL HEALTH PRIORITY

Children will get top priority in Missouri's new mental health program, according to Dr. Addison M. Duval, state director of mental health. He said the work with children will be in two lines, institutions for the mentally retarded, and treatment centers for mentally or emotionally disturbed children. It is estimated that the St. Louis State School and Hospital and the Marshall State School and Hospital have a total of 2,500 patients, 900 more than there are facilities for, and there is a waiting list of 700 children. New additions to the two institutions to be finished soon might cut the waiting list in half, Dr. Duval hopes. Dr. Duval says that there will still be a need for about 2,000 more beds in hospitals for the mentally retarded. As Dr. Duval states it, "That amounts to two more institutions needed."

Organization

AMERICAN MEDICAL ASSOCIATION

President, Louis M. Orr, M.D., Orlando, Fla.
President-Elect, E. Vincent Askey, M.D., Los Angeles, Calif.
Clinical Session, Dallas, Texas, December 1-4, 1959.
Annual Meeting, Miami Beach, Florida, June 13-17, 1960.

MISSOURI STATE MEDICAL ASSOCIATION

102nd Annual Session, St. Louis

March 13-16, 1960

President, Ralph Perry, Kansas City.
President-Elect, R. O. Muether, St. Louis.
Vice Presidents, James R. Meador, Clayton; G. D. Shull, Jefferson City; J. J. Wimp, Kirksville.
Treasurer-Editor, Charles R. Doyle, St. Louis.
Secretary, J. I. Matthews, Jefferson City.
Speaker of the House of Delegates, O. P. Hampton, University City; Vice Speaker, William C. Mixson, Kansas City.
Field Secretary, Ray McIntyre, St. Louis.
Assistant Editor, Helen Penn, St. Louis.
Executive Secretary, Tom R. O'Brien, 623 Missouri Theatre Bldg., 634 N. Grand Blvd., St. Louis 3.

Delegates to the American Medical Association

Joseph C. Peden, Sr., St. Louis; alternate, Dean Sauer, St. Louis, 1958-1959. F. L. Freierabend, Kansas City; alternate, Rolla B. Wray, Nevada, 1958-1959. Durward G. Hall, Springfield; alternate, Guy N. Magness, University City, 1959-1960. H. E. Petersen, St. Joseph; alternate, J. Loren Washburn, Versailles, 1959-1960. A. W. Neilson, St. Louis; alternate, Dean Sauer, St. Louis, 1960-1961. Richard H. Kiene, Kansas City; alternate, Rolla B. Wray, Nevada, 1960-1961.

Standing Committees

Scientific and Postgraduate Work—John I. Matthews, Jefferson City, Chairman (1960); M. Pinson Neal, Columbia (1962); John A. Growdon, Kansas City (1961); James G. Janney, St. Louis (1961); Hector W. Benoit, Kansas City (1960). **Associate Members**—W. P. Maddux, Springfield; J. H. Keim, Cape Girardeau; Wilbur A. Mullarky, St. Louis; Wyeth Hamlin, Hannibal; Kenneth K. Keown, Columbia; Robert W. Smith, Marceline.

Defense—C. E. Hyndman, St. Louis, Chairman (1960); Roland S. Kieffer, St. Louis (1962); W. W. Gist, Kansas City (1962); L. P. Forgrave, St. Joseph (1961); Ronald F. Elkins, Springfield (1961).

Public Policy and Public Relations—R. O. Muether, St. Louis, Chairman; C. C. Cohrs, Moberly; R. J. Crider, St. Charles; Rolla B. Wray, Nevada; James E. McConchie, Independence; C. B. Schoeberl, Joplin; H. W. Carrington, Lebanon; John R. Dixon, Brookfield; R. R. Lyle, Versailles.

Medical Education and Hospitals—Kenneth Glover, Mount Vernon, Chairman (1962); William A. Knight, Jr., St. Louis (1962); George J. L. Wulff, University City (1961); Doyle C. McCraw, Bolivar (1961); Ralph R. Coffey, Kansas City (1960).

Cancer—Marvin L. Napper, Springfield, Chairman (1961); John J. Modlin, Columbia (1961); George A. Carroll, St. Louis (1962); E. Kip Robinson, Kansas City (1962); Joseph L. Fisher, St. Joseph (1960). **Associate Members**—John E. Lamy, Sedalia; Byron E. Watts, Jefferson City; Charles E. Lockhart, Springfield; Milton Shoss, Cape Girardeau; Henry C. Allen, St. Louis; James R. McVay, Jr., Kansas City.

Medical Economics—A. P. Rowlette, Moberly, Chairman (1961); George L. Hawkins, St. Louis (1962); John R. Forgrave, St. Joseph (1961); A. B. Smith, Kansas City (1960). **Associate Members**—R. D. Duncan, Springfield; G. W. Winn, Boonville; E. D. Imes, Maryville; John T. Crowe, Cape Girardeau; Robert E. Kirshman, Joplin.

Mental Health—John J. O'Hearne, Kansas City, Chairman; Robert J. Mueller, St. Louis; H. V. Guhleman, Jefferson City; James N. Haddock, Webster Groves; D. R. Edwards, Sedalia; A. L. Brown, Springfield; Arnold S. Block, St. Louis; Albert Preston, Kansas City; N. Venay Bolin, Kansas City.

Maternal Welfare—James E. Keeler, Kansas City, Chairman (1961); William B. See, Columbia (1962); E. E. Wadlow, St. Joseph (1962); Joseph M. Krebs, St. Louis (1961); Joseph L. Johnston, Springfield (1960). **Associate Members**—P. V. Siegel, Smithton; H. C. Willumson, St. Joseph; A. C. Trueblood, St. Louis; Irwin T. Craig, Joplin; J. J. Wimp, Kirksville; Forrest C. Long, Savannah; E. G. Hamilton, St. Louis; A. B. Sinclair, Kansas City.

Infant and Child Care—E. J. Schwartz, Springfield, Chairman; Daniel B. Landau, Hannibal; H. E. Petersen, St. Joseph; R. J. LaDriere, St Louis; Guy N. Magness, University City; L. L. Davis, Mexico; James J. Pascoe, Nevada; Jack N. Wiles, West Plains; James A. Kinder, Cape Girardeau; Sanford F. Cockerell, Independence.

Health and Public Instruction—John R. McDaniel, St. Joseph, Chairman (1960); Roy A. Walther, Overland (1962); F. H. Hartwig, Kansas City (1962); J. Earl Smith, St. Louis (1961); E. A. Belden, Jefferson City (1960). **Associate Members**—William T. McNew, Carthage; Chester R. Peck, Kennett.

Constitution and By-Laws—W. A. Bloom, Fayette, Chairman (1960); H. M. Parker, Kansas City (1962); Charles E. Martin, St. Louis (1962); W. L. Allee, Eldon (1961); P. W. Jennings, Canton (1961).

Fractures—Robert E. Funsch, University City, Chairman (1961); Paul W. Meyer, Kansas City (1962); Lee T. Ford, St. Louis (1962); O. P. Hampton, University City (1960); Thomas G. Otto, Cape Girardeau (1960). **Associate Members**—William C. Francis, Springfield; B. L. Murphy, Hannibal; Otis E. James, Kansas City; William C. Critchlow, Sikeston.

Eye Health—John McLeod, Kansas City, Chairman (1962); H. B. Stauffer, Jefferson City (1962); T. E. Sanders, St. Louis (1961); H. B. Ivy, Springfield (1961); Paul G. Wolff, Cape Girardeau (1960). **Associate Members**—Dick H. Underwood, Kansas City; Paul B. Webb, St. Louis; Michael F. Pernoud, St. Louis; D. E. Eggleston, Macon; W. L. Post, Joplin; Robert S. Minton, St. Joseph; William B. Wilcoxen, Bowling Green.

Laboratory Medicine—Hollis N. Allen, St. Louis, Chairman (1962); Joseph E. Flynn, Columbia (1962); Victor B. Buhler, Kansas City (1960); Angelo Lapi, Kansas City (1961); Fred C. Coller, Springfield (1960).

Industrial Health—H. M. Roebber, Bonne Terre, Chairman (1960); S. W. Scorse, Joplin (1962); Vencel W. Hollo, St. Louis (1961); William H. Duncan, Kansas City (1961); Douglas A. Ries, Richmond Heights (1960). **Associate Members**—James W. Clawson, Springfield; C. Rush McAdam, St. Louis.

Diabetes—H. E. Oppenheimer, Clayton, Chairman (1960); Lucien W. Ide, St. Joseph (1962); J. Bruce Lemmon, Springfield (1961); H. M. Gilkey, Kansas City (1961); Charles M. Lamke, Columbia (1960). **Associate Members**—William H. Olmsted, St. Louis; Robert E. Koch, Clayton; Ralph W. Casford, Kansas City; J. H. Walterscheid, Hannibal.

Anesthesiology—Russell D. Shelden, Kansas City, Chairman (1961); E. O. Kraft, St. Louis (1962); O. T. Blanke, Joplin (1961); W. W. Tillman, Springfield (1960); Carl K. Ness, St. Joseph (1960).

Hospital and Professional Relations—Hollis N. Allen, St. Louis, Chairman (1961); Victor B. Buhler, Kansas City (1962); W. S. Sewell, Springfield (1961); Stanley S. Peterson, Springfield (1960); Carl F. Vohs, St. Louis (1960). **Associate Members**—W. F. Francka, Hannibal; Ralph Perry, Kansas City.

Control of Venereal Disease—Edwin M. Powell, Springfield, Chairman (1962); T. E. McMillan, Kansas City (1962); E. M. Cannon, St. Louis (1961); A. W. Neilson, St. Louis (1961); Robert B. Bristow, St. Joseph (1960). **Associate Member**—John E. Byrne, St. Louis

Physical Medicine and Rehabilitation—D. Elliott O'Reilly, St. Louis, Chairman (1961); F. D. Sundstrom, Springfield (1962); William J. Stewart, Columbia (1962); F. O. Tietjen, Jefferson City (1961); John W. Cashman, Kansas City (1960). **Associate Member**—Otakar Machek, St. Louis.

Civil Defense—Carl D. Siegel, Sedalia, Chairman; M. P. Leech, Fayette; H. D. Steinbeck, Union; Carroll P. Hungate, Kansas City; A. S. Bristow, Princeton; John R. Forgrave, St. Joseph; J. M. Canella, Hannibal; Curtis H. Lohr, Clayton; R. Ned White, Springfield; George E. Thoma, St. Louis; George L. Watkins, Farmington; John A. Griffith, Kansas City.

Aging—Stanley S. Peterson, Springfield, Chairman; Ralph Perry, Kansas City; Rolla B. Wray, Nevada; Louis H. Kohler, St. Louis; C. Thorpe Ray, Columbia.

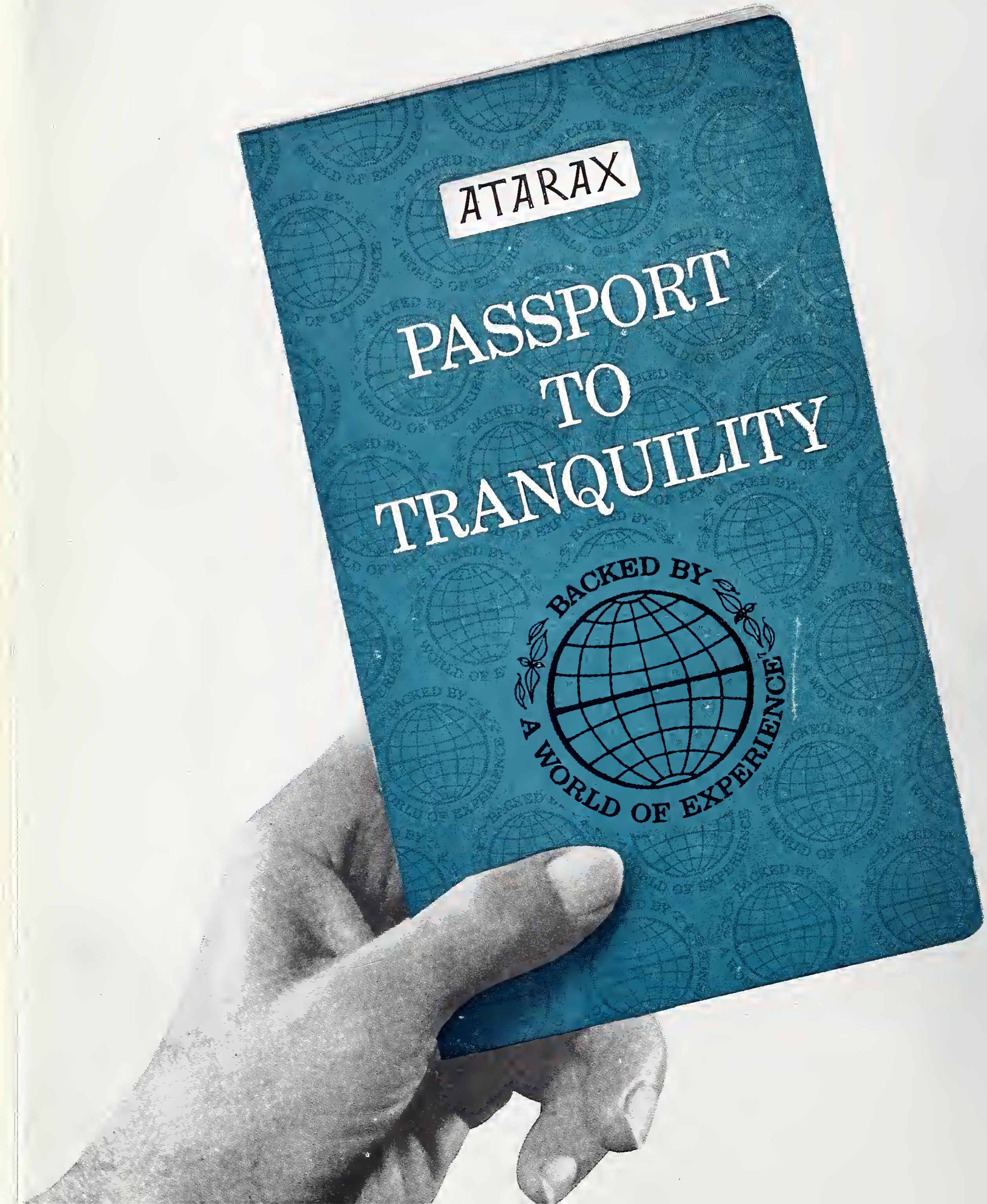
Special Committees

Tuberculosis—F. E. MacInnis, Kansas City, Chairman; Paul Murphy, St. Louis; H. M. Roberts, Kansas City; Joseph L. Lucido, St. Louis; Walter C. Gray, St. Louis; David N. Kerr, St. Louis; Glenn O. Turner, Springfield; Carl G. Popp, Sikeston (1960).

Study of Cardiac Disease—Earl L. Loyd, Jefferson City, Chairman; E. Lee Shrader, St. Louis; William I. Park, Springfield; E. J. McIntire, Carthage; A. M. Estes, Cape Girardeau; Stanley F. Morest, Kansas City; William J. Gillespie, St. Louis; Carl A. Potter, St. Joseph; E. E. Glenn, Springfield; F. J. Biggs, Poplar Bluff (1960).

Rural Medical Service—A. E. Spelman, Smithville, Chairman; William J. Shaw, Fayette; B. J. Bass, Salem; John F. Pearl, St. Clair; Charles H. Lewellen, Louisiana; C. A. McBurney, Slater; Jack Mullen, Bonne Terre; A. J. C. McCallum, Aurora (1960).

American Medical Education Foundation—James P. Murphy, St. Louis, Chairman; Hugh E. Stephenson, Columbia; Donald F. Gose, Springfield; Russell D. Shelden, Kansas City; Allen I. Herman, St. Joseph (1960).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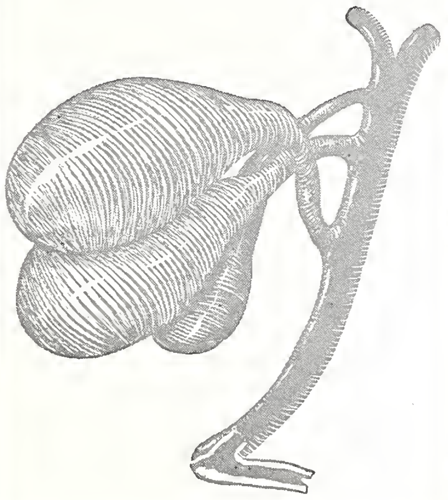
Source: Skilboe, B.: Am. J. Clin. Path. *30*:252, 1958.



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(1) Beckman, H.: Drugs: Their Nature, Action and Use, Philadelphia, W. B. Saunders Company, 1958, p. 425.
(2) Biliary Tract Diseases, M. Times *85*:1081, 1957.

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Missouri Academy of General Practice

John F. Pearl, M.D.

Representatives from 46 state chapters, composing a registration of 157 people, attended the 1959 State Officers Conference sponsored by the American Academy of General Practice in the Muehlebach Hotel in Kansas City on Saturday and Sunday, September 26-27.

This is an occasion when State Academy officers come together to learn from each other and to explore new methods of improving existing chapter functions. This year's conference, when adding together attendance, interest and participation, was the best to date in this venture of fall programs.

The Missouri Academy was well represented.

The Missouri Academy and two of its local chapters, the Kansas City Academy and the St. Louis Academy, were well represented at the conference.

Dr. Shaw was on the program.

Those registered from Missouri were: P. C. Hall, M.D., Barney Finkel, M.D., Walter T. Gunn, M.D., Charles E. Martin, M.D., W. A. Mullarky, M.D., Miss Eleanore Schmied of St. Louis; R. R. Becker, M.D., Edson Carrier, M.D., M. B. Casebolt, M.D., R. G. Elliott, M.D., of Kansas City; William J. Shaw, M.D., Fayette; P. V. Siegel, M.D., Smithton; and Ray McIntyre from the State Academy Office. Members of the Missouri delegation were contributors to the program as well as absorbers.

Dr. Martin was among speakers at the meeting.

William Shaw, of Fayette, presented a paper on the formal program entitled, "Graduate Preparation for General Practice." Dr. Shaw has been quite active for a number of years in the development of residency training programs for general practice. Charles E. Martin gave an interesting and informative discussion on "Hospital Problems in a Metropolitan Area." Both of these papers were well received and Drs. Shaw and Martin are to be congratulated.

Drs. Gunn, Finkle and Hall evidenced much interest.

Other members of the Missouri delegation took part in the discussion periods set aside following

(Continued on page 1419)

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The Woman's Auxiliary

MRS. STANLEY S. PETERSON

What can the Auxiliary do to help—to help the medical societies, to help our communities, to help ourselves and our families? These are the questions which were asked at the sixteenth Annual Conference of state presidents, presidents-elect, national officers and chairmen, held October 5-7 in Chicago.

Mrs. Stanley S. Peterson

The answers which were given by speakers, panels and group discussion periods were some of the most practical and helpful we have ever received.

To help the medical societies in fulfilling their aim of protection of public health and advancement of health education, Auxiliary members must first *be informed.* We must understand current medical legislation so that we can discuss it intelligently. We were urged to become acquainted with our Congressmen and their families, so that when we appeal to them to support our convictions by their votes, we will be talking to them as friends and individuals, and not just as names on the voting rolls back home. We were encouraged to arrange informal social gatherings so that the Congressmen and our members, as well as members of other organizations whom we invite to be our guests at these affairs, can get to know each other.

By our continued and ever-increasing efforts to raise money for the American Medical Education Foundation, we are also serving the medical profession. Our goal nationally is two dollars per member. In Missouri last year our average was $1.83 per member, and we are striving harder than ever to achieve our goal this year.

At the Conference Dr. George Lull, chairman of AMEF, presented our National President, Mrs. Frank Gastineau (who was the first national Auxiliary AMEF chairman), with a beautiful antique silver tureen, in recognition of her efforts in behalf of this fund. She, in turn, presented the tureen to the Auxiliary, to be used as a trophy, to be awarded to the state auxiliary making the most outstanding contribution to AMEF during this year. This award will be made at the National Convention in Miami next June.

Through our efforts to interest young people in medical and related careers, we serve the profession as well as the public. Most of the county auxiliaries offer scholarship or loan funds to student nurses. The state auxiliary has established a medical student loan fund which is now self-sustaining. The excellent recruitment films, "Helping Hands for Julie" and "I Am a Doctor," are being shown to student groups throughout the state. These are available through the A.M.A. office in Chicago.

The new A.M.A. Program for the Aging was reviewed at the Conference by Mr. George Cooley, Secretary, Council on Medical Service, A.M.A. We were told that by taking an interest in this program in our own communities, by surveying facilities available in each town or city, by supplying this information to the medical societies, and by our willingness to promote, assist or participate in local projects for the aging, we are helping others to help themselves, and in turn helping the medical profession to combat Forand-type legislation.

In the Safety presentation at this meeting, the emphasis was on safety in the home, particularly in protecting children from poisoning by housecleaning products and medicines commonly available in every home. We can serve our communities by passing along safety information through literature and speakers to other organizations, and can serve ourselves by making our own families and homes safe by observing basic safety precautions.

One of the goals for this year is to have the Civil Defense yellow and orange sticker bearing the words "This Home Is Prepared for Emergency" in the window of every A.M.A. home. To earn such an award sticker, each family must complete a check list of twenty items, showing that the family and home are equipped and prepared for emergencies: supplies are stockpiled, and each member of the family knows the part he is to play in the family emergency plan. Kits describing how this award may be won, with detailed information for assembling supplies, constructing shelters, instructing the members of the family, have been compiled by the Office of Civil Defense Mobilization, and may be distributed by the county auxiliaries to all members.

Service is the rent we pay to live in a community. Yet doctors' wives cannot serve wholeheartedly unless they are members of the Auxiliary. At the Conference we were told that a doctor's wife cannot afford not to belong to the Auxiliary—in these times she cannot afford not to know what is going on in organized medicine—she cannot afford not to be part of the group which is striving to present a united front to the community. Women are always interested in the things that interest their husbands. Doctors, please keep your wives informed on what is going on in medical circles, urge them to attend the Auxil-

(Continued on page 1419)

Component Societies in Affiliation With the Missouri State Medical Association

COUNTY	DISTRICT	PRESIDENT	ADDRESS	SECRETARY	ADDRESS
Andrew	1	V. R. Wilson	Rosendale	M. L. Holliday	Fillmore
Audrain	5	Harold D. Lankford	Mexico	Ernest S. Gantt	Mexico
Barton-Dade	8	Thomas W. Carroll	Lamar	Herbert M. Arnold	Lamar
Benton	6	T. S. Reser	Cole Camp	James A. Logan	Warsaw
Boone	5	Leroy Miller	Columbia	Joseph E. Flynn	Columbia
Buchanan	1	George W. Forman	St. Joseph	William B. Rost	St. Joseph
Butler-Ripley-Wayne	10	T. E. Ruff	Poplar Bluff	E. T. Hansbrough	Poplar Bluff
Callaway	5	A. K. Baur	Fulton	Vernon B. Jackson	Fulton
Camden	5				
Cape Girardeau	10	Paul Wolff	Cape Girardeau	G. M. Hoxworth	Cape Girardeau
Carter-Shannon	9	H. D. Rollins	Winona		
Chariton-Macon-Monroe-Randolph	2	C. C. Weger	Keytesville	Josephine Baker	Moberly
Clay	1	Reinhardt D. Dwyer	North Kansas City	James E. McCormick	Kansas City
Clinton	1	W. B. Spaulding	Plattsburg	J. P. Mabrey	Plattsburg
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Cooper	5	Vernon D. Friedrichs	Pilot Grove	T. C. Beckett	Boonville
Dallas-Hickory-Polk	8	D. C. McCraw	Bolivar	C. H. Barnett	Bolivar
Dunklin	10	Leo J. Benson, Jr.	Kennett	E. L. Spence	Kennett
Franklin-Gasconade-Warren	4	Paul A. Brenner	Owensville	William Richardson	Union
Grand River Medical Society (Caldwell-Livingston-Carroll-Grundy-Daviess-Harrison-Linn-Mercer-DeKalb)	1	E. W. Allen	Carrollton	E. A. Duffy	Trenton
Greene	8	J. G. Siceluff	Springfield	G. Bruce Lemmon, Jr.	Springfield
Henry	6	Richard King	Clinton	R. S. Hollingsworth	Clinton
Howard	5	W. C. Allen	Glasgow	W. A. Bloom	Fayette
Jackson	7	Harold L. Gainey	Kansas City	Edward G. Kettner	Kansas City
Jasper	8	Irwin T. Craig	Joplin	David Allen	Joplin
Jefferson	4	Robert H. Donnell	Crystal City	John F. Rutledge	Crystal City
Johnson	6	Keith D. Jones	Warrensburg	T. Reed Maxson	Warrensburg
Lafayette-Ray	6	Walter E. Koppenbrink	Higginsville	Thomas B. Cook	Richmond
Lewis-Clark-Scotland	2	J. R. Bridges	Kahoka	P. W. Jennings	Canton
Lincoln-St. Charles	4	E. O. Damron	Elsberry	P. H. Rother	St. Charles
Marion-Ralls-Shelby	2	Julius Well	Palmyra	J. H. Walterscheid	Hannibal
Mid-Missouri County Medical Society (Phelps-Crawford-Dent-Pulaski-Maries-Laclede)	9	H. W. Carrington	Lebanon	M. K. Underwood	Rolla
Miller	5	W. L. Allee	Eldon	Carl T. Buehler	Eldon
Mineral Area County Medical Society (St. Francois-Iron-Madison-Washington-Reynolds-Ste. Genevieve	10	Marvin T. Haw	Bonne Terre	George L. Watkins, Jr.	Farmington
Moniteau	5	K. S. Latham	California	L. M. Gallagher	California
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Morgan	5	Robert R. Lyle	Versailles	Ruth Kauffman	Versailles
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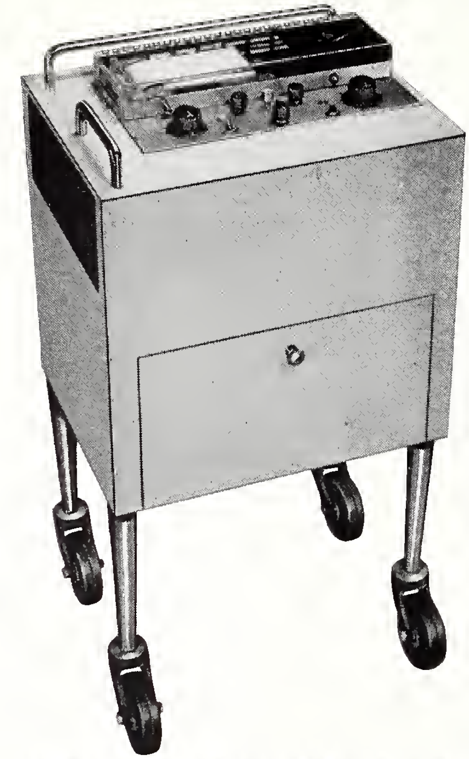

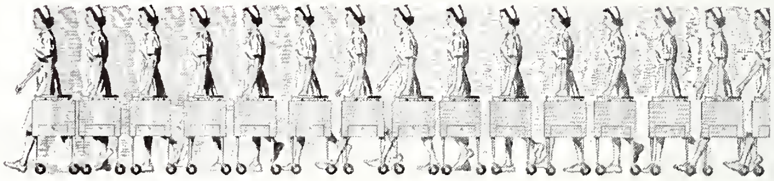

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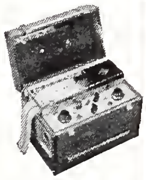

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Missouri Medicine

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Etiology of Peptic Ulcer

S. ARTHUR LOCALIO, M.D., *New York*

In spite of enormous experimental and clinical effort the etiology of ulcer cannot be delineated either simply or with general agreement. It would be tempting to avoid the problem and categorically state that the cause of ulcer is unknown but that unfortunately would ignore valuable and useful information regarding the pathogenesis and therapy of this ubiquitous disease.

After sifting much material, three factors appear to remain significant, probably in the genesis and certainly in the propagation and chronicity of this disease. The first, the eroding factor, and the second, the factor of tissue resistance, are applicable to all ulcers in animal or man. The third, the systemic, constitutional and neurogenic factor is applicable principally to man.

The etiology of human peptic ulcer is based on the interplay of all of these factors. Spontaneously or by therapeutic design this interplay can be and is modified so that peptic ulcer is a dynamic and, at times, an unpredictable disease. These factors should be explored and weighed always mindful of their interdependence.

The eroding factor or simply the acid pepsin factor is a common denominator in peptic ulcer. There are innumerable human observations and animal experiments that indicate the importance of the acid-pepsin factor. It is important to indicate that the mechanism of erosion resides in a combination of both acid and pepsin. There is strong evidence that neither acid nor pepsin alone are capable of erosion. The animal experiments of Man and Williamson, proving that undiluted gastric chyme is capable of producing ulcer, have been repeated in innumerable variation. The highly acid gastric juice produced by the injection of histamine in beeswax or the transplanted antrum exposed to constant stimulation and resulting in a more physiologic hypersecretion have become standard methods of producing ulcer in animals. Indeed, the two-stage gastrectomy leaving the antrum and ulcer, therapeutically short lived, supplied human evidence for the erosive capacity of the hypersecretion of acid-pepsin.

Acid-pepsin is derived from the parietal cells which are sparsely distributed in the antrum, abundant in the fundus and most numerous in the parsmedia. These cells react to stimuli of cerebral origin mediated by the vagi. They react, as indicated, to hormonal stimuli originating in the antrum and also to hormonal stimuli originating in the small intestine. These cells have the capacity of local stimulation by the presence of material within the stomach, and chemical stimulation by such materials as histamine, caffeine, nicotine and many others.

Suffice it to say that any stimulating mechanism, no matter what its pathway, may have the capability for ulcer formation. Such diverse factors as the ulcers associated with intra-cranial tumors, those associated with the stress syndrome, and those associated with the non-beta cell islet tumors all have a hypersecretion of acid-pepsin as a common denominator.

One cannot leave the eroding factor without mention of an important associated mechanical consideration. Smith and Rivers have compared this to the garden hose that digs a hole where the stream of water incessantly strikes the lawn; hence, the frequency of ulcer of the stomach along the magenstrasser or the lesser curvature, and in the duodenum at the point of contact of the post-pyloric jet. This mechanical consideration will obviously play a part not only in the genesis of

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Presented at the Fourth Annual Spring Clinical Conference, University of Missouri Medical Center May 13, 1959.

the site of the ulcer, but also in its perpetuation and chronicity so long as the jet maintains its focus.

Living tissue exposed to normal concentration of acid-pepsin has the ability to resist digestion. This experiment, repeated with organ transplant into the stomach, has established the factor of tissue resistance. Were it not for this the stomach would digest itself. This capacity is inherent within the intracellular enzyme systems and ceases with death of the cell. The ability of a cell to produce mucus, such as the Brunner glands of the duodenum, probably has an additional local protective effect against erosion.

The task is principally to explore the mechanisms that alter tissue resistance. The vascular system plays a prominent role as demonstrated by the local diminution of the blood supply in fat emboli following fracture, and the local ischemia of overactive vasomotor phenomena of drugs such as pitressen. The high incidence of ulcer in polycythemia has been attributed to local ischemia secondary to thrombosis of small vessels of the stomach. There is evidence of a relatively poor vascularization of the lesser curvature and first portion of the duodenum making these areas more vulnerable to vascular alteration. It is difficult to equate the importance of such factors as local allergy, decrease in the anti enzyme content of cells, general debility of the cells as a result of anemia, malnutrition or specific deficiencies.

To place the factor of tissue resistance in perspective it must be noted that living tissue can protect itself against digestion by the usual concentrations of gastric juice. Tissue loses the battle for survival if these concentrations are abnormal, as demonstrated by Dragstedt in isolated gastric pouches. Here is a demonstration of the interplay between the eroding and the resistance factors.

Finally, a discussion of tissue resistance cannot be complete without an indication that different tissues have greater or lesser resistance to the same eroding factor. The example of the patient with a duodenal ulcer treated by gastro-enterostomy with healing of the duodenal ulcer and development of an ulcer at the jejunal stoma is all too clear. The greater possibility of marginal ulcer as the gastrointestinal anastomotic site moves distalward from the ligament of Treitz is well known in man and animal, and is another manifestation of decreasing local tissue resistance.

Systemic and constitutional factors in the genesis of ulcer are unquestionably of great importance. They can be studied only in the human. They are elusive in understanding, responsible for the many exceptions to the so-called "ulcer diathesis" and prevent a simple categorical recitation of the etiology of ulcer.

With the movement of medicine from the bedside to the laboratory, such anatomic characteristics as the anthropometric facies of Draper and Touraine, and the hyperesthenic gastric diathesis of Hurst have been largely discarded.

The psychiatrist has made the psyche a modern and popular consideration in the etiology of ulcer. Much attention has been devoted to temperament and psychologic constitution of the ulcer patient. Although, I do not hasten to agree, one must admit that the concept of ulcer temperament and personality does have merit.

This problem of the psyche and environmental factors in ulcer is attested by the increasing frequency of this disease during the last 50 years. The increased stress of this age of rush and hurry, and the multitudes of worries, frustrations and disappointments walk hand in hand with progress and ulcers. The most striking support for stress in the etiology of ulcer is supplied by the far greater incidence of ulcer in the American Negro as compared to his fellow in Africa.

A finally constitutional factor that may have an etiologic bearing is that of malnutrition. A striking example is given by the incidence of ulcer in India where the ill-fed south is prone to the disease, while the better nourished north is exempt; in the south the disease is common among tapioca fed coolies, but rare among shore dwellers who supplement their diet with fish.

In conclusion I have not been able to indicate a single entity responsible for ulcer. I have tried rather to indicate that the erosion of acid-pepsin in a container of inadequate resistance, in individuals with constitutional susceptibility, all work together to give rise to peptic ulcer. Even the anatomic variation of ulcer, esophageal, gastric, anastomotic or duodenal, can be consistent with these three major factors.

DR. HALL HEADS MISSOURI CHAMBER

Durward G. Hall, M.D., Springfield, was named president of the Missouri Chamber of Commerce at a meeting on October 9. Dr. Hall is a past president of the Springfield Chamber of Commerce and is chairman of the Citizenship Responsibility Council of the state Chamber of Commerce. He has served two terms on the state board of directors and is a member of the United States Chamber of Commerce's committees on Economic Security and Membership.

Cancer of the Lip

E. J. SCHEWE, Jr., M.D., *Columbia*

CARCINOMA OF the lip remains a comparatively serious problem among the citizens of rural Missouri. I choose this category because most of the cases at the State Cancer Hospital occur in this particular group of individuals.

Though this is partially a selection factor, there are several other factors which appear to have bearing upon this observation. There is agreement that excessive exposure to sunlight plays a part in the development of skin cancer in general. There is further agreement that the light-complexioned, fair-haired individual exhibits greater susceptibility to the harmful effects of actinic rays. These qualifications fit well the rural Missourian, the majority of whom are of Northern European extraction and who earn their living in an out-of-doors environment.

The seriousness of the problem is, of course, a more relative one. The actual incidence of lip cancer is not great. Fortunately, it is a slowly evolving lesion and usually can be caught in time, so to speak. However, the magnitude to which these tumors are allowed to progress before treatment is sought complicates the available treatment methods and tends to jeopardize the prognosis. It is not unusual to be confronted with a lesion of several years duration which involves at least one half of the lower lip. The delay in seeking medical advice is probably more related to the pecularities of human nature rather than to any existing defect in a cancer detection program. These tumors are "up front" where everyone can see them. Food passes over them daily. It is caressed by the tongue innumerable times each day. And yet, it is the advanced symptoms of bleeding, pain, malodorous exudate, or the offensiveness of the tumor to family and neighbors that eventually drives these patients to the doctor.

Lip cancers are found almost always on the lower lip and are uncommon in the female. Their relation to pipe smoking or other forms of tobacco usage is conjectural. They are invariably epidermoid carcinomas and usually of low histologic grade. The point of origin is the mucocutaneous junction. Basal cell carcinomas of the lip arise from the skin primarily and should not be considered primary lip cancers. The only other histologic type encountered is the adenocarcinoma arising from minor salivary glands in the substance of the lip.

The tumor assumes two chief growth patterns; the infiltrating, ulcerating type, and the bulky, exophytic type. There is no particular prognostic significance attached to the gross configuration of the tumor, although when an occasional highly malignant tumor is encountered it is usually an infiltrating one.

Lip cancers are seldom confused with other diseases of the lip. Leukoplakic changes and keratoses can resemble early cancers. Luetic lesions are uncommonly seen. Other chronic inflammatory lesions usually respond promptly to appropriate local measures. The presence of induration in the base of the lesion should arouse suspicion as to the presence of a neoplasm and any doubt can be readily dispelled by submitting the lesion to biopsy.

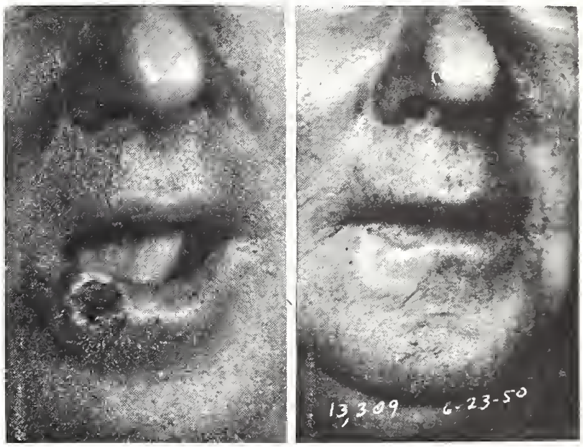

Fig. 1. A typical epidermoid carcinoma of the lower lip to which external radiotherapy was applied. Complete control of the tumor was achieved with no late recurrence. Metastases did not develop.

The treatment of lip cancer is a comparatively simple matter when reduced to its basic features. Two major forms of treatment modalities exist—that of surgery and that of radiotherapy. Several factors enter into the choice of which to select. First, each form of treatment is regarded as equally effective in controlling cancer of the lip so, from the standpoint of curability of the tumor, this is not a major consideration. The foregoing statement presumes, however, that if surgery is selected that all the neoplasm be excised and that if radiotherapy is chosen that proper factors of distance, kilovoltage, filtration, fractionation and total dosage be strictly adhered to. In other words, in applying the best of surgery or the best of radiotherapy the end results should be equal in

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Chief Surgeon and Medical Director, Ellis Fischel State Cancer Hospital, Columbia, Mo.

terms of cure of the primary tumor, with a local recurrence rate of less than 5 per cent for each form of treatment.

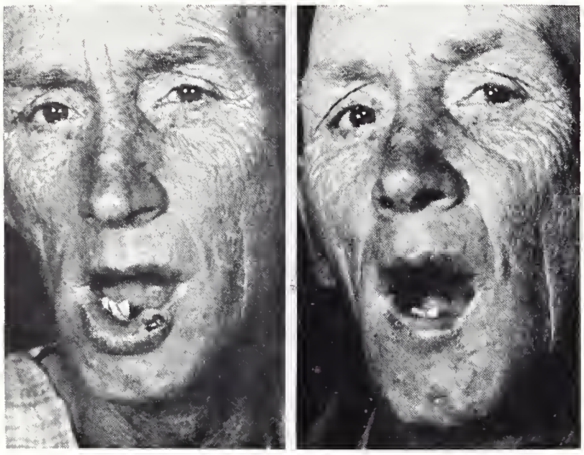

Fig. 2. An infiltrating tumor of the lip which was removed by "V" excision and primary closure. The cosmetic result is satisfactory with good function of the oral stoma.

The major factors to be considered are essentially three in number: (1) the size of the tumor, (2) the invasiveness of the tumor and (3) the cosmetic and functional result to be anticipated.

Infiltrating tumors respond equally well to radiotherapy or surgery. With radiotherapy, minor or major defects of lip substances have been known to occur as the tumor disappears. For this reason, as well as expediency, most of these tumors are excised at the Cancer Hospital. Superficial tumors can likewise be treated by either method but when extensive in dimensions they are best irradiated because excision would require a major reconstructive procedure. The surgery of lip cancer is seldom of such magnitude that poor general condition or advanced age of the individual would contraindicate selecting this form of treatment if it is otherwise indicated.

The management of lymph node metastases is likewise a subject of some controversy. Approximately one out of 10 cases when first seen will have a cervical lymph node metastasis. Approximately one out of 10 cases will develop a metastasis following treatment of the primary tumor. These metastases are principally to the submaxillary group of lymph nodes on the involved side and rarely to the submental nodes alone.

It is now generally agreed that there is little place for the prophylactic neck dissection. The low incidence of metastases does not seem to justify the large number of unnecessary neck dissections that would be performed by adhering to this policy. We regard the most effective means of controlling lymph node metastases to be complete radical neck dissection. Lesser procedures may occasionally be adapted to poor risk individuals, but recurrences below the field of resection will occur with discouraging frequency when lesser procedures, such as supraomohyoid or submaxillary triangle dissections, are routinely employed.

Slightly more than one half of all metastases are permanently controlled by this management. The mortality from neck dissection is less than 3 per cent, even in this advanced age group, and age alone is rarely a contraindication to the operation.

The role of radiotherapy in neck metastases is distinctly second choice. The availability of supervoltage therapy shows some indication of altering this point of view under certain limited circumstances, but until adequate confirmatory evidence accumulates the surgical approach to lymph node metastases remains the most effective consistent means of control.

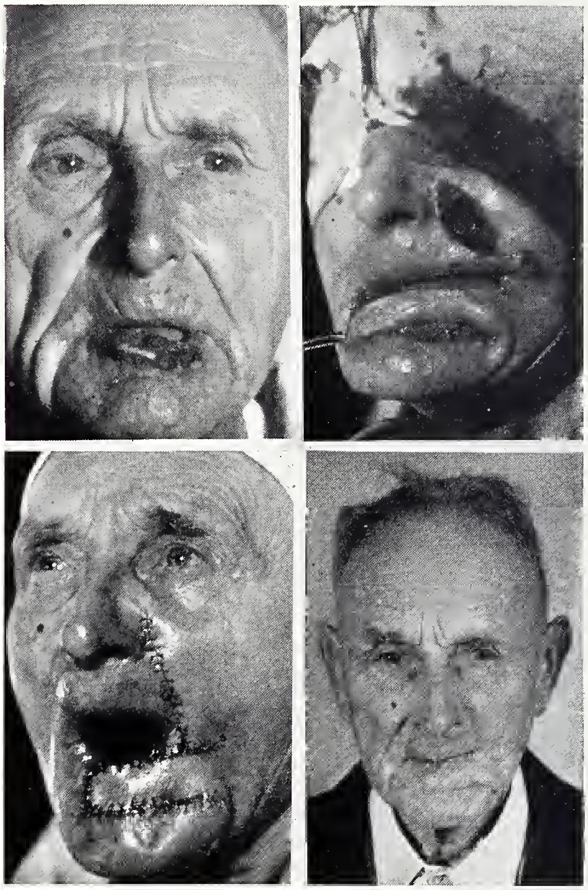

Fig. 3. A tumor involving two thirds of the lower lip. This extensive lesion was managed by wide excision and repair of the defect with a full thickness flap obtained from the nasolabial region of the upper lip and cheek in a single stage. In spite of the advanced state of this tumor, no local recurrence or lymph node metastases have developed in a three year period.

SUMMARY

1. Lip cancer occurs most commonly on the lower lip, in the male and is usually a low grade epidermoid carcinoma.

2. Treatment measures employing either radiotherapy or surgery are equally effective in con-

Skeletal Metastasis From Carcinoma of The Colon and Rectum

An Evaluation

BART F. WOOLDRIDGE, M.D., *Joplin*

IT IS WELL known that carcinoma involving certain organs has a tendency to metastasize to the skeletal system. Tumors of the breast, prostate, bronchus, thyroid and kidney possess a rather high incidence of bone metastasis.[14, 18, 19, 22] Whereas, other carcinomas infrequently are included with the lesions that usually cause bone metastasis, the incidence of skeletal metastasis from carcinoma of the colon and rectum is high enough to be of clinical concern.

The purpose of this presentation is to record an interesting case with long bone metastasis from carcinoma of the sigmoid colon and to point out that the incidence of this finding is such that one should be constantly aware that it may occur either early or late in the course of the disease.

Metastatic carcinoma is by far the most common malignant bone tumor.[9] The incidence of metastasis to the skeleton by carcinoma in general from whatever primary site is probably greatly underestimated. If one resorts to x-ray skeletal survey, many additional carcinoma foci might be diagnosed clinically. However, one must recognize that roentgen examination alone has inherent limitations and does not necessarily indicate the full extent of skeletal involvement. Fifty per cent of vertebrae examined by Bachman[3] and shown pathologically to harbor malignant implants did not evidence disease diagnosable by x-ray studies.

In autopsy series the incidence of skeletal metastasis has been variously reported from 15 per cent to 30 per cent in all patients dying of carcinoma.[3, 14, 18, 19, 20, 22, 23] This incidence depends obviously upon the thoroughness with which the bones are examined, grossly and microscopically. It is significant that in 1950, in a survey of carcinoma metastasis in 1,000 autopsied cases, Abrams, Spiro and Goldstein[1] found the incidence of widespread metastasis, including those in the skeleton, to be actually higher than previous literature would lead one to believe. Specifically, in their large series of cancer patients, 27 per cent of the entire group showed skeletal metastasis. More than two thirds of breast carcinoma, one third of lung carcinoma and one fourth of renal carcinoma had spread to one or more bones. They demonstrated further that carcinoma in locations not ordinarily thought of as spreading to the skeleton had done so in an appreciable number of instances. For example: pancreas, 13 per cent; rectum, 13 per cent; stomach, 11 per cent; colon, 9 per cent; and ovary, 9 per cent.

A voluminous literature indicates that almost any malignant tumor of almost any organ may metastasize to any bone and result in a rather common or a most bizarre clinical and x-ray pattern. Von Recklinghausen claimed that the order of frequency of bone metastasis in various parts of the skeleton would be as follows: vertebrae, femur, pelvis, ribs, sternum, humerus, skull, tibia, radius and ulna. Practically all statistics since have, in the main, confirmed his original contention.[9] Hematogenous metastasis tends to occur in those bones in which red marrow is found, and the nearer a bone is to the site of primary malignancy the greater its susceptibility to a metastatic deposit.[3, 20] It is generally held that it is distinctly unusual to find skeletal metastasis below the knees and elbows. Reported cases of metastatic deposits in bones of the feet and hand, however, point out the vagaries of carcinoma metastasis.

The first recorded case of carcinoma of the rectum with bone metastasis was reported by Curling[11] in 1870. Colostomy for rectal obstruction had been performed 17 months before death. Postmortem examination revealed carcinoma in the pelvis and a metastasis in the upper one third of the radius. Since then, case reports and autopsy

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Cancer of the Lip—Continued

trolling the primary tumor. When treatment is properly applied, local recurrence should not exceed 5 per cent.

3. Lymph node metastases will occur in about 10 per cent of the cases. A prophylactic neck dissection is not indicated. Contralateral metastases are uncommon. A complete radical neck dissection should be carried out when clinically positive nodes are encountered.

4. Neck dissection will produce clinical control of the metastases in about 60 per cent of the cases. Failure takes place most commonly in the anaplastic, rapidly evolving tumors.

5. There is little indication at this time for radiotherapy in the management of metastases.

series have indicated the incidence of skeletal metastatic spread from carcinoma of the colon and rectum to be between one half of 1 per cent and 10 per cent. In 1938, Brown and Warren[6] reported a 5 per cent incidence of bone metastasis. Ghormley and Valls,[15] from a clinical study, placed the incidence of metastasis to bone at one half of 1 per cent of all cases of carcinoma of the gastrointestinal tract, with the highest incidence of such metastasis in cases of carcinoma of the rectum. Bacon reported 15 cases in 1940 in a series of 366 cases of carcinoma of the rectum, an incidence of 4.4 per cent. Coley,[9] in 1949, stated that according to most writers, carcinoma of the gastrointestinal tract metastasizes to bone in 1 to 3 per cent of cases. Bacon,[5] in 1953, in reviewing 600 cases of carcinoma of the rectum, found an incidence of 6 per cent of skeletal metastasis. The large autopsy series of Abrams et al. indicated skeletal metastasis in 9.3 per cent of the carcinoma of the colon. The true incidence will probably be undetermined.

Some authors say that metastasis of carcinoma of the gastrointestinal tract to bone rarely occurs because the portal system filters out the carcinoma emboli.[16] Consideration has been given to metastatic osseous spread of carcinoma, especially to the skull, pelvis and spinal column by the way of the paravertebral veins. This method of spread would seem important when visceral organs and lungs have escaped metastatic spread but osseous spread is evident. Evidence of the importance of the venous route of spread from carcinoma of the colon continues to accumulate.[8, 10, 21] The invasion of the veins by the tumor occurs chiefly along its periphery in the pericolic or perirectal fat and to a lesser extent in the submucosa.[4] Once inside a vein, it may be carried along branches of the superior or inferior messenteric vein to the liver. Occasionally, in low rectal tumors, the middle hemorrhoidal veins may be involved, and emboli may reach the general circulation and the lungs. It is well known that vein invasion is closely related to the histology of the tumor. The higher the grade of malignancy the more frequent is vein involvement. The threat of vein invasion is seen in any analysis of five years survival rates which show differences of statistical significance.[6, 13, 16]

From reported cases of carcinoma of the colon and rectum, the vertebrae are the favorite sites of skeletal metastasis and the reported lesions have been, as a rule, multiple. Bacon[4] lists the following sites in their order of decreasing frequency of involvement: sacrum, lumbar vertebrae, innominate bones, dorsal spine, skull, ribs, sternum, clavicle and femur. An average of two years had elapsed following the original diagnosis before skeletal metastasis became evident in many case reports.[2, 12, 17] Both osteoclastic and osteoblastic types of metastasis have been recorded with a preponderance of the former. No typical x-ray appearance is evident; however, a notable feature in many of these lesions is a proliferative reaction of expanded periosteum.[3, 14] In the shafts of long bones, concentric onionskin laminae are often formed. Pain is frequently a prominent clinical feature and pathologic fracture is not uncommon. With the exception of hypernephroma and the prostate, the site of the primary tumor often cannot be identified by the microscopic appearance of the metastatic lesions in bone.

Deep x-ray irradiation may be resorted to for palliation in these cases. One should bear in mind that the dosage should not be pushed to the point at which it induces radiation necrosis or enhances the liklihood of pathologic fracture. The results, while distinctly worthwhile in many instances, are, on the whole, unpredictable.

CASE REPORT

A 30 year old white female was first seen with a six months' history of intermittent bleeding per rectum and an occasional diarrheal stool. Barium enema x-ray revealed an obstructing lesion at the rectosigmoid level (fig. 1). Sigmoidoscopic examination revealed an annular sessile-type neoplasm at the 14 centimeter level. Tissue study of this lesion revealed a high grade adenocarcinoma. Preoperative chest x-ray was nonrevealing (fig. 2). Following suitable bowel preparation, an anterior resection of the rectosigmoid was accomplished, followed by tube cecostomy and anal sphincterotomy. The liver was grossly normal to palpation and inspection. Tissue study revealed an 8 centimeter margin distal to the neoplasm. Definite pericolic fat invasion was present but there was no evidence of lymph nodal metastasis. Her postoperative hospital convalescence was uneventful.

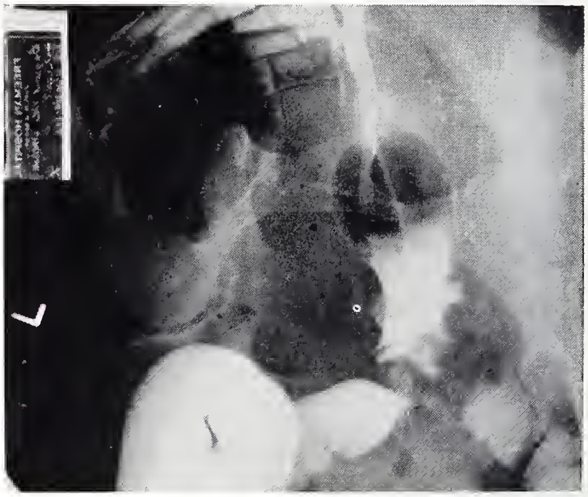
Fig. 1 Preoperative barium enema examination.

Approximately 12 months following her definitive surgery she developed a hacking cough which responded poorly to antitussives. Three months later it was apparent by x-ray study that she had bilateral pulmonary neoplastic disease and by this time she had begun to experience pain in the right upper tibial area with weight bearing. X-ray studies revealed an ill-defined osteolytic-type lesion of the tibial tubercle area and an associated periosteal reaction (figs. 3 and 4). Sigmoidoscopic examination demonstrated a singular strictured area 8 centimeters above the anal margin and biopsy was interpreted as showing recurrent adenocarcinoma of the sigmoid colon involving the rectum. Papanicolaou smears of the sputum were negative for malignant cells. Biopsy of the tibial lesion was undertaken and pathologic study revealed fragments of mucus producing malignant acinar structures, compatible with metastasis from the previously diagnosed carcinoma of the sigmoid colon (fig. 5).

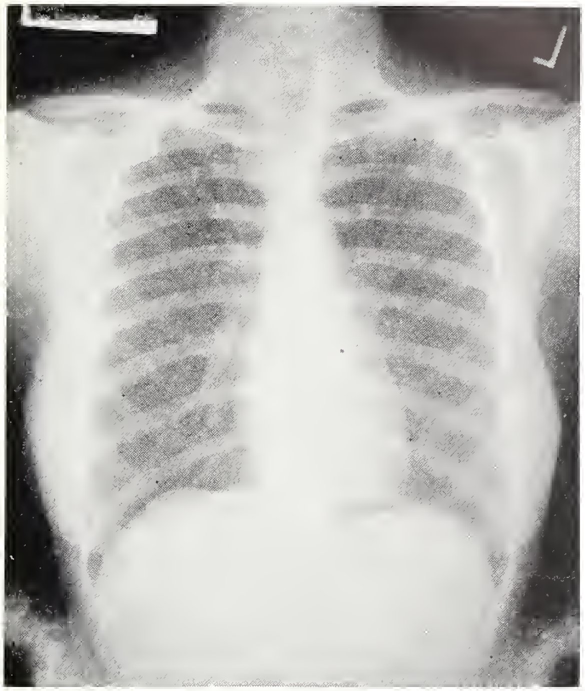

Fig. 2. Preoperative chest x-ray.

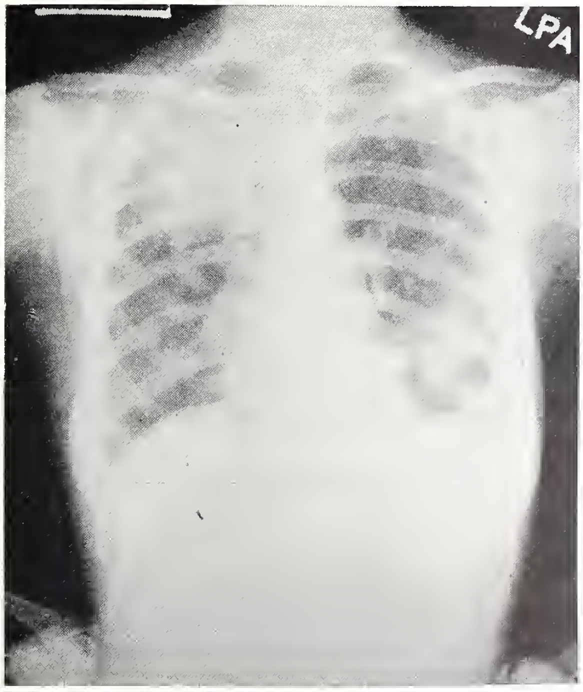

Fig. 3. Chest x-ray study 12 months following colon resection.

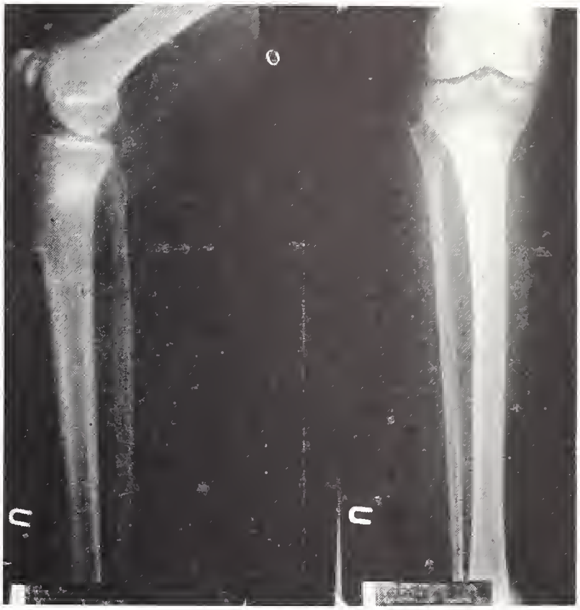

Fig. 4. X-ray appearance of right tibia 12 months following colon resection demonstrating ill defined osteolytic lesion and periosteal reaction.

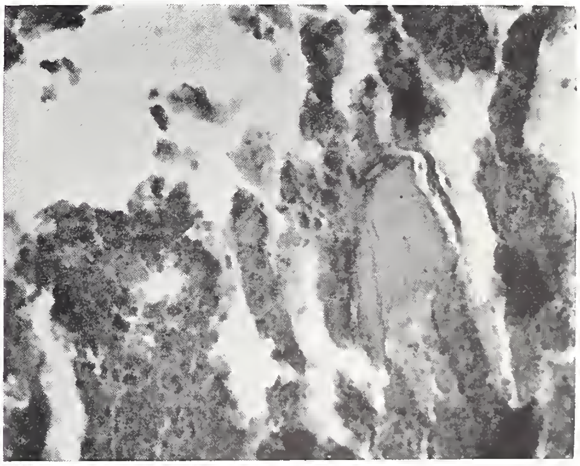

Fig. 5. Microscopic appearance of osteolytic lesion of right tibia X350.

Subsequently, weight bearing on the right lower extremity was restricted and a course of deep x-ray therapy was given, delivering a total of 1250 roentgens to the tibial lesion. Only mild pain relief was forthcoming and considerable analgesia was resorted to.

A "Dry-Mix" of Methylphenidate in Children's Psychiatric Problems

Clinical Appraisal

MAURICIO KNOBEL, M.D., *Kansas City*

THE FIELD of psychopharmacology is being pervaded with a flow of new drugs which demand the attention of the investigator and the clinician. The necessary new trials and experimentations tend to lead to the neglect of some of the relatively known products. Even though some of these "old" psychopharmaceuticals were proven efficacious in many instances their maximum application has not been explored and their utilization is being displaced to an unmerited oblivion.

Some of these products have applications which were not quite known when they were originally introduced. For instance, good results were obtained with Methylphenidate in children's behavior disorders;[1, 2] the hyperactive child especially seems to respond with restfulness, better attention span and coordination and, in general, with a more "integrated" type of behavior.[1]

A "dry-mix" of Methylphenidate* provided a liquid form of this medication which was well received by patients and their parents. Some children have difficulty in swallowing tablets or pills and the liquid form facilitates the intake of the drug without the emotionally traumatic results of the "tablet-rejecting" child.

Since the use of the mix was encouraging, I wish to report results on a clinical test of this dry-mix.

The report is on 20 children, selected at random, who came to the Child Guidance Clinic. Some of them were part of another study,[2] and some were routine cases. Thus, the accumulated data on these patients do not follow an organized, structured pattern. There were 18 boys and two girls. The age range was from 5 to 13 years old. The IQ was over 90 except in four cases where it was lower (IQ's of 84, 74, 65, 63). Since the selection was random and no particular screening system was followed the children had received different sets of tests, the WISC or the Binet being the more frequently administered to determine intelligence.

Seventeen of these children had neurologic examinations, six of them by the psychiatrist and 11 by a neurologist with training and experience in child neurology (Dr. F. Fowler). Soft neurologic signs were always present (adiadochokinesis, hy-

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Assistant Director, Department of Child Psychiatry, The Greater Kansas City Mental Health Foundation, Kansas City, Missouri.

* Supplied by Ciba Pharmaceutical Inc., Summit, New Jersey, under the trade-mark of Ritalin.

Metastasis—Continued

She continued to lose weight; subsequently developed ascites and expired 25 months following the original colon resection.

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perreflexia, choreiform movements) and some cases presented severe neurologic problems such as cerebral palsy or sequelae of a cranial hemangioma, for example.

Electroencephalographic studies were done in 18 cases, 15 of them showing clear abnormalities of the focal, diffuse or paroxysmal types or a combination of them.

Psychiatrically, the patients were classified as (1) hyperactive behavior disorder, (2) severe neurotic problems and (3) psychotic cases with either hyperactive or withdrawal features predominating. Eleven fell into the first category, four into the second and five into the third one.

Before medication started, or shortly thereafter, a behavioral rating scale devised by Burks[3] was filled out by the teachers of 13 of these children. Scores ranged from 40 to 120 points, with a mean of 83.6. According to this rating scale, the higher the score the greater the severity in the behavioral disorganization.

All of these patients started treatment with the "dry-mix" of Methylphenidate at a dose of 5 mgs. daily. Every week the daily dosage was increased 5 mgs. provided no severe side effects or no marked improvement were reported. The dosage finally obtained was from 10 to 100 mgs. daily. The duration of treatment ranged from one month to 15 months. Of the 20 cases, 14 showed a manifest improvement (70 per cent), three presented a questionable amelioration (15 per cent), two did not change (10 per cent), and one became worse (5 per cent).

It was observed that the child's behavioral pattern altered to a more integrated, socially acceptable, goal-directed type of conduct. The child who was hyperactive, distractible and restless became more attentive, coordinated and calm. The withdrawn signs faded, and these children became more interested in human and intellectual contacts. Irrationality gave place to a more thoughtful type of ideation with the psychotic group. In general, a convergence of behavioral traits toward the generally accepted concept of an approximate normality was observed.

No correlation between psychiatric entity, neurologic signs, IQ, EEG, sex, age, behavior scale rating and improvement was found. The duration of treatment was determined by a stablized improvement according to parents and psychiatrist's criteria or by lack of results after some period of time. After one month of treatment the medication was discontinued for the one child who became more restless and irritable.

Side effects were minimal; diminished appetite, sleeplessness, occasional headache were reported and handled accordingly without having to discontinue the medication. Usually an increased dosage would take care of contingent problems reported by the parents. The most effective, average dose, in the sample, was 30 mgs. of Methylphenidate, twice a day. Care was taken to recommend that the first dose be given at breakfast time and the second, and last, right after lunch, mainly to avoid sleeplessness.

The criteria to consider a child as improved was based on the parents' reports on their children's behavior and the psychiatrist's clinical observation of the child. Whenever possible teachers were consulted. It is noteworthy that the 13 children who were rated by their teachers according to Burks Behavioral Scale, presented, after a period of two to eight months in treatment, a considerable decrease in score. The childrens' final ratings ranged from 37 to 113 points, with a mean of 67.4, indicating a decrease of 16.2 points from the mean of 83.6 obtained before medication began. Some children obtained high decreases (120 to 75, 111 to 54). The cases with questionable or no improvement showed increases in their rating scale.

In 11 of these children it was possible to repeat the EEG study after a period of three to six months of treatment, and three of them showed a definite change in their EEG pattern, since in this second tracing no abnormalities were noted while there were definite ones in the first recording.

Again, it must be pointed out that because of the unstructured design of this study no significant correlation could be found among any of the data and, thus, work with a larger sample of cases and with a structured design will be necessary in the future.

The liquid form of Methylphenidate is absolutely well received and tolerated, and is considered a good addition to the now available broad psychopharmaceutic armamentarium.

SUMMARY

A clinical report is given on 20 children with psychiatric problems who were given a dry-mix of Methylphenidate in order to provide a liquid form of administration of this medication. The results show 70 per cent marked improvement.

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The Specialty Journals in Brief

Practice of Surgery in a Neuropsychiatric Hospital

Walter E. Marchand: A.M.A. Arch. Gen. Psychiat. **1**:123-131 (Aug.) 1959.

Psychotic patients present special difficulties in both diagnosis and treatment, yet 13 years of experience in a neuropsychiatric veterans hospital have shown that the presence of a psychosis does not alter the physical signs of disease and does not preclude the obtaining of a medical history or the administration of modern therapy. In surgical cases, preoperative management includes due preparation for all the experiences in the operating room; consent to operation has been refused only in extremely rare instances, and it is no longer necessary to struggle with patients to get them anesthetized. When the cooperation of a patient is needed for operations under local anesthesia, preoperative medication generally should be minimal.

The postoperative course is usually uneventful, but it is necessary to remember that the psychotic patient seldom complains of pain, is not likely to be careful with tubes and catheters, cannot be counted upon to cough up secretions, and may attempt ambulation too soon. The psychiatric behavior of the patient is especially important in orthopedic surgery because splints, casts, and traction apparatus may be tampered with or misused as lethal weapons by assaultive or suicidal patients.

Trusses, braces, colostomy bags, and ambulatory urinals are unsuitable for most psychotic patients, and with patients potentially suicidal the triangular bandage, the elastic bandage, lengths of roller bandage or adhesive tape, as well as clips or safety pins, must be avoided. Difficulties with urination and defecation have frequently been found to be an expression of the psychosis itself, but the two functions interfere with each other in the sense that a greatly distended bladder has at times been found to prevent evacuation while in other cases fecal masses in patients with megacolon have caused urinary retention. Cataract extractions have been successful in 19 psychotic patients, with definite changes for the better in 10 patients whose improved vision greatly increased their capacity for self-care. The presence of a full-time surgeon in a neuropsychiatric hospital has been shown to result in a low surgical mortality rate; it also is reassuring to the patients and their families.

Bowen's Disease and Its Relationship To Systemic Cancer

James H. Graham and Elson B. Helwig: A.M.A. Arch. Dermat. **80**:133-159 (Aug.) 1959.

The characteristic finding in the disease described by Bowen is a chronic solitary lesion composed of lenticular papules. The histological picture of atypical epithelial proliferation also occurs in multiple, nonelevated, scaly or crusted plaques. Specimens for study were obtained from 35 patients after death and were compared with similar materials from 35 patients with senile keratosis, 35 with squamous-cell carcinoma of the skin, 139 with exfoliative dermatitis, and many other patients with other cutaneous diseases. The average age of onset for the 35 patients with Bowen's disease was 54 years; the duration of the lesion from onset to surgery ranged from 5 months to 30 years.

The lesions ranged in diameter from 0.7 to 13 cm. with a median of 1.9 cm. They usually appeared as erythematous, pigmented, crusty, scaly fissured, keratotic plaques. Their configuration varied from round plaques, sharply demarcated from the surrounding tissue, to an irregular, polycyclic, lenticular pattern. They were firm, indurated, rough, and granular to palpation. The first lesion surgically removed was most frequently diagnosed as squamous-cell or basal-cell carcinoma, and only once was the diagnosis of Bowen's disease made at the first examination of a specimen. Surgical excision of the lesion is the recommended treatment; the need for sufficiently wide excision was indicated by the fact that in four patients the lesions were clearly invasive and in two others widespread metastases appeared. The evidence of an association of Bowen's disease with internal and cutaneous cancer was convincing, and it is suggested that the lesions are cutaneous manifestations of a systemic carcinogenic disease process.

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SEARLE

Case Report

Amebic Liver Abscess

With Fatal Cerebral Abscess and Meningitis

WILLIAM D. HOADLEY, M.D., *Kansas City*

Craig in 1944 demonstrated that amebiasis is not limited to tropical or subtropical localities. The over-all incidence of infection was found to be approximately 11.6 per cent in persons examined in all parts of the United States.[1, 2]

Hepatic amebiasis is the most common site of extra-intestinal infection. The averages range from 8 per cent to 36 per cent of cases with intestinal infection.[3] Amebic hepatic infection occurs predominantly in males in a ratio of four to one, mostly in the third and fourth decades.

The diagnosis of amebic hepatitis or abscess is made with relative ease once the condition is suspected. Hepatic involvement may occur without history of intestinal infection. Characteristically, symptoms consist of low grade fever, intermittent or remittent in type, loss of weight, malaise, pain and tenderness in the right upper quadrant, with or without a diaphragmatic component, the latter being more common in hepatic abscess. Hepatomegaly is almost always present. Laboratory findings are nonspecific but follow a definite pattern. A moderate leukocytosis without increase in polymorphonuclear cells is usually present. Liver function studies are rarely altered significantly. There may be a decrease in the albumin fraction, an increase in the globulin fraction, with a normal total protein level. Ameba may be demonstrated in only about 45 per cent of patients on examination of the stool, frequent repeated examinations yielding the highest percentage of results. Roentgenography is particularly useful. Elevation and immobility of the right diaphragm is common. Pulmonary and pleural reaction occurs. Elevation is primarily medial and anteriorly.[1, 2, 4, 5, 6]

REPORT OF CASE

First Admission.—This 43 year old Negro male entered Kansas City General Hospital for the first time on July 16, 1958, with the chief complaint of "loss of weight" and recurrent "shoulder pain."

Present Illness.—The patient dated the onset of symptoms from February 1958, when he noted pain in his right side and right shoulder. He did not consult a physician and the pain left after approximately two weeks bed rest. Anorexia was marked and night sweats were frequent. From February until June the patient lost weight from 186 pounds to 128 pounds. No elevated temperature was noted. The right shoulder pain recurred intermittently during the five month period. For approximately two days prior to admission the patient noted moderate to severe right costal margin pain which increased with deep inspiration. Hemoptysis and dyspnea were denied. A mild non-productive cough was noted.

Positive Findings in the System Review.—Bowel movements were noted to be watery and frequent for short periods of time for the last six months and then would become normal. No melena was described.

Past History.—There were no previous medical illness or surgical procedures. Twenty-four years previously the patient had been treated for gonorrhea and lues.

Family History.—The patient's mother was 61 years of age and was said to be in good health except for arthritis. The father was 63, living and well. Three female siblings were living. The patient's wife was living and well.

Personal and Social History.—For several months prior to the present illness the patient worked for the sewer department cleaning sewer pipes. He smoked two packages of cigarettes per day and consumed an unknown amount of alcohol per day for ten or fifteen years.

Physical Examination.—Blood pressure was 110/60. Temperature was 100.8F. Pulse was 100 and respirations 25. The patient was a well developed Negro male with evidence of recent weight loss. He appeared chronically ill.

Skin.—A rather sallow appearance was noted and it was felt the patient was mildly icteric.

Lymph Nodes.—Generalized mild adenopathy was found.

Neck.—The trachea was in the midline and the thyroid was not palpably enlarged.

Chest.—There was tenderness to percussion in the anterior chest over the costal margin. Dullness to percussion was found over the right lower chest, anterior and posterior. There were decreased breath sounds in this area. No rales were heard.

Heart.—The PMI was in the fifth intercostal space at the midclavicular line. The rate was 100/min. P2 was equal to A2. No thrills or murmurs were heard. Peripheral pulses were palpable and equal.

Abdomen.—The abdomen was soft. The liver was palpable 4 to 6 centimeters below the right costal margin and was slightly tender. The kidney and spleen were not palpable. Bowel sounds were normal.

Genitalia.—Normal male.

Rectal.—Normal.

Back and Extremities.—Not abnormal.

Neurologic.—Normal.

Initial Laboratory Work.—Hemoglobin 9.1 grams;

Senior Resident, Department of Medicine, Kansas City General Hospital, Kansas City, Missouri.

white blood count 25,050 with 79 PMNL, 18 lymphocytes, 2 monocytes, 1 eosinophile. Urinalysis: Acid reaction, 1.019 specific gravity, 1 albumin, negative sugar, 8-9 WBC/HPF. VDRL: Reactive, Kolmer 4+; BUN: 9.5; sugar: 104 mg. per cent; total bilirubin: 0; cephalin flocculation: trace; SGOT: 23 units; cholesterol: 103; cholesterol esters: 70 per cent; albumin: 3.75; globulin: 3.45; alkaline phosphatase: 5.05 Bessey-Lowry Units (normal 2.3 units); thymol turbidity: 2.5; thymol flocculation: negative; sedimentation rate: 35 mm./hr.

Hospital Course.—A PA chest film revealed no active pneumonic process, a rather markedly elevated right diaphragm with what was as felt to be a localized eventration anteriorly and medially. With these findings the diagnosis of amebic hepatitis with abscess formation was considered a good possibility. The first four stool specimens were negative for ova and parasites. At this point a sigmoidoscopy was done with direct smear of mucosa following cathartics. This specimen was positive for cysts of Endamoeba histolytica. On July 24, 1958, the patient was begun on Fumagillin, 20 mg. t.i.d., and Chloroquin, 500 mg. b.i.d., for two days, then 250 mg. b.i.d.[7, 8, 9, 10, 11] Clinically, marked improvement occurred and the patient became nearly asymptomatic. The white blood count dropped to 9,450 on August 17, 1958. From July 24, 1958, until August 19, 1958, the patient gained approximately 20 pounds in weight. The right diaphragm remained elevated, however, and occasional right shoulder pain occurred. On August 19, 1958, a pneumoperitoneum was performed, demonstrating adherence of the right diaphragm to the dome of the liver. The next day under local anesthesia, the liver abscess was aspirated with a 17 gauge needle inserted through the 8th intercostal space at the anterior axillary line. Approximately 90 to 100 cc. of dark red, thick, "chocolate sauce" material was aspirated without complication. A liver biopsy was performed at the same time. The patient's hemoglobin remained approximately 8 to 10 grams, the white blood count was 12,000, and the alkaline phosphatase remained elevated, otherwise the patient was markedly improved. Culture of the material from the abscess grew coagulase negative Staphylococci which was felt to be a contaminant. No amebae were found in the aspirated material. The liver biopsy was reported as normal liver with minimal portal fibrosis. The patient was discharged August 29, 1958.

Second Admission.—The patient was again admitted on September 12, 1958. He had been drinking heavily and was again experiencing right shoulder pain. Clinically, the patient looked well and had gained more weight. On physical examination, some coarse rales were heard in the right lung base and the liver was still somewhat enlarged. The hemoglobin was 9 gram, white cell count was again elevated to 19,700, without left shift. Again therapy with Chloroquin was instituted in preparation for repeat aspiration. Shortly after admission, the patient began coughing up thick, dark red sputum in large amounts, and the shoulder pain ceased. At this point open surgical drainage was considered,[12, 13] but the procedure was refused by the patient, as was repeat needle aspiration. Postural drainage was instituted and good response obtained. The patient became again asymptomatic and was discharged on Chloroquin.

Third Admission.—The patient was not seen again until October 5, 1958, when he was admitted for a grand mal seizure. On physical examination, the patient was felt to be in a post-ictal state. Rales were heard in the right lung base. Neurologic examination was normal. A lumbar puncture was done revealing normal pressure, clear fluid, 43 mg. per cent protein and no cells. The patient's sensorium cleared rapidly and he signed out against medical advice on October 7, 1958.

Last Admission.—On October 10, 1958, the patient was again admitted with a history obtained from his wife. He had apparently done well until the day of admission when he again had a grand mal type seizure and was unable to talk or walk. The temperature was 101F., and a flaccid paralysis was noted on the right side. No papilledema was seen. A lumbar puncture was done with an opening pressure of 290 mm. of water. The fluid was cloudy and contained 2,900 cells, all polymorphonuclear. Cultures were obtained and Chloromycetin, Sulfadiazine and penicillin therapy begun. Following this the patient deteriorated rapidly and died on October 13, 1958.

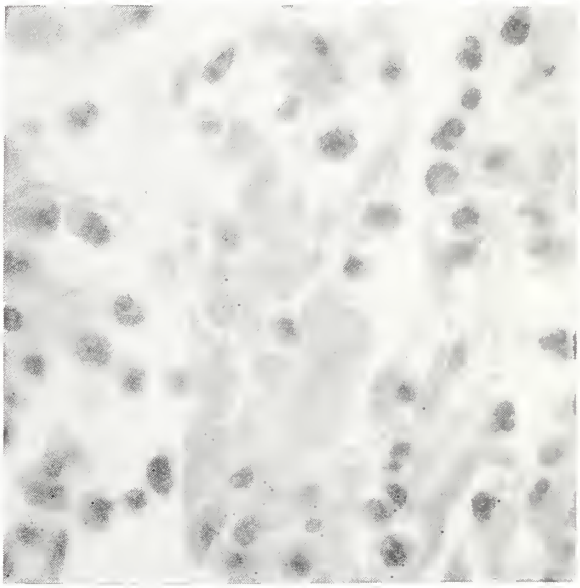

Fig. 1. Lung containing trophozoites of endamoeba Histolytica, containing ingested red cell. Haematoxylin and Eosin. 980 X.

Autopsy Findings.—Significant findings at autopsy were limited to the lungs, liver and brain.

Lungs.—Each lung weighed approximately 550 gm. There were dense fibrous adhesions at the right lung base. A fistulous tract was noted to extend from the dome of the liver, through the diaphragm, communicating with a small abscess in the right lower lobe. There was no apparent communication with a bronchus. On microscopic examination, the wall of the tract was noted to contain trophozoites of Endamoeba Histolytica (fig. 1).

Liver.—The liver weighed 2,150 grams. In the superior portion of the right lobe, an abscess measuring 8 by 12 cm. was found (fig. 2). The cavity contained approximately 100 cc. of material consistent in appearance with the material previously aspirated. No other abscesses were found. On microscopic examination the densely fibrotic wall of the abscess cavity contained trophozoites (fig. 3).

Brain.—The brain weighed 1,700 grams. On the outer surface of the left hemisphere in the frontal area and extending to the parietal area, an exudate was noted overlying a soft, fluctuant abscess cavity. There was a 1 by 1 cm. rupture of this cavity with dark red pus emerging on pressure. On section the abscess cavity measured approximately 6 cm. across (fig. 4). On microscopic examination, again trophozoites were found in the abscess wall (fig 5).

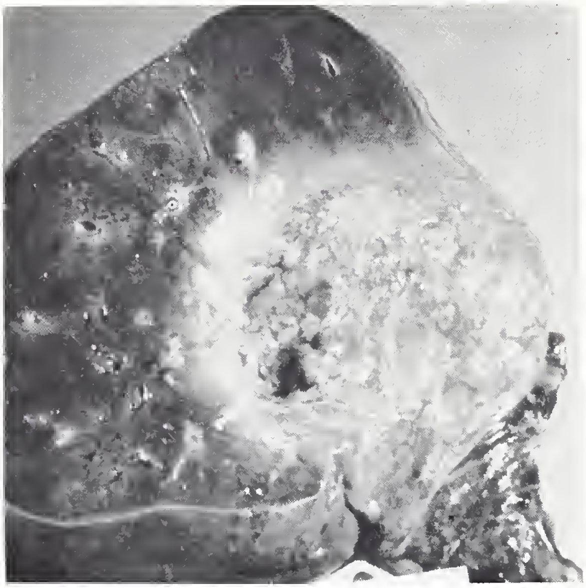

Fig. 2. Liver with abscess in dome of right lobe.

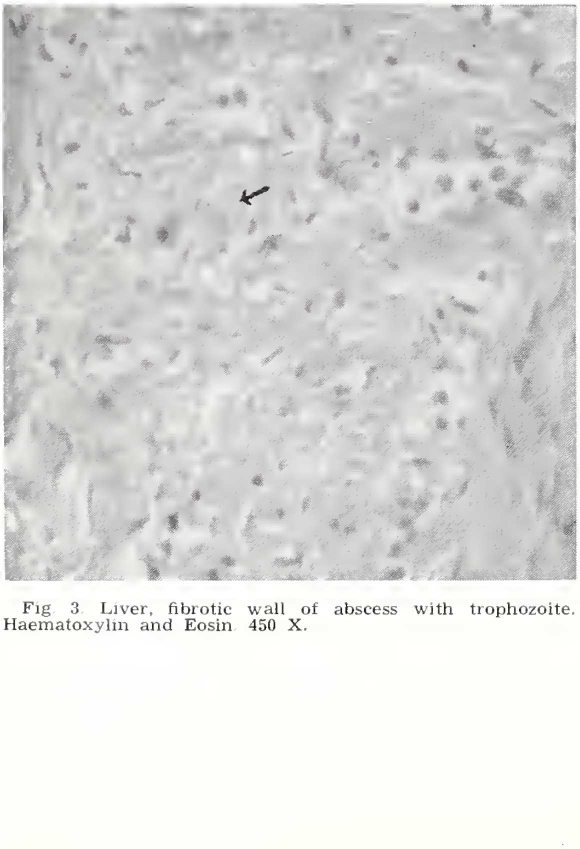

Fig. 3. Liver, fibrotic wall of abscess with trophozoite. Haematoxylin and Eosin. 450 X.

The colon was negative grossly and microscopically for amebic lesions.

DISCUSSION

The early course of this case was typical of a chronic amebic hepatic abscess. Initially good response was obtained with chemotherapy and then rather rapid deterioration occurred with fatal brain abscess and meningitis. It was felt that the poor results obtained later in the course of this

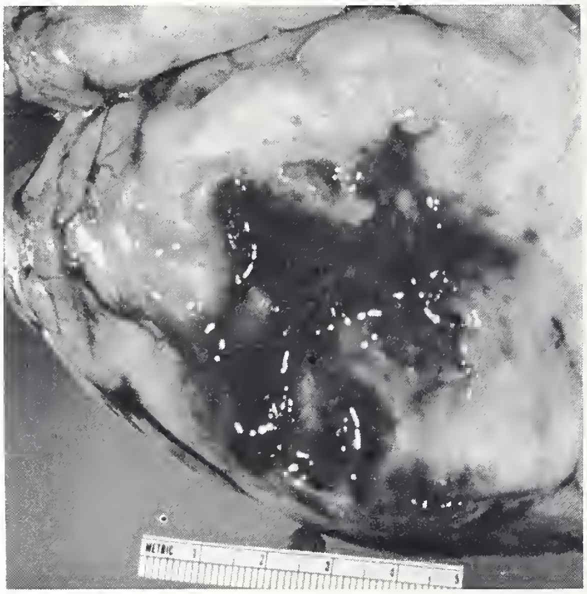

Fig. 4. Brain, cross section with abscess.

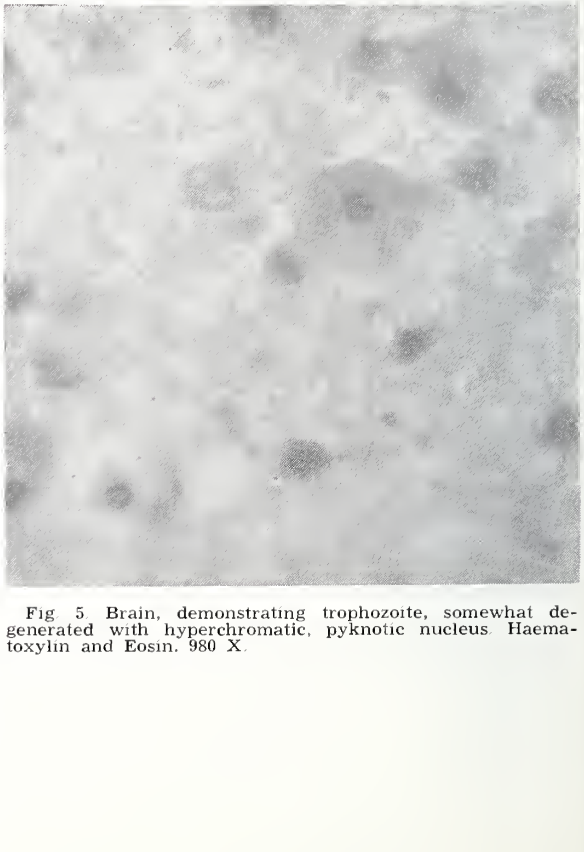

Fig. 5. Brain, demonstrating trophozoite, somewhat degenerated with hyperchromatic, pyknotic nucleus. Haematoxylin and Eosin. 980 X.

patient's disease were at least partly attributable to poor patient cooperation by refusing to submit to repeated aspirations or open drainage. Cerebral abscesses in amebiases are infrequent. Halpert and Ashley[14] in 1944 reviewed the literature and found 61 cases of cerebral abscess, 55 occurring with both hepatic and pulmonary amebic disease. Since that time, at least six more[2, 6, 15] have been reported, of which four had associated hepatic and pulmonary disease. These complications occur only in far advanced stages of the disease. The small number of cases reported in the recent literature is interesting to note. The mechanism by which ameba reach the cerebral parenchyma is obscure.

SUMMARY

A case of amebic abscess of liver, lung and brain is reported with fatal outcome. A brief discussion of symptomatology and diagnosis is presented.

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NUCLEAR MEDICINE JOURNAL ESTABLISHED

The Society of Nuclear Medicine has announced the forthcoming publication of its official organ, *The Journal of Nuclear Medicine*. The first quarterly issue will appear during the month of January 1960.

Dr. George E. Thoma, St. Louis, has been appointed editor. The associate editors are: Drs. Titus C. Evans, Iowa City; Niel Wald, Pittsburgh, and Eugene L. Saenger, Cincinnati.

The editorial content of the journal will be directed toward those members of the medical and allied professions who are interested in the diagnostic and therapeutic application of radioisotopes and in human radiobiology.

Manuscripts and books for review should be directed to the editor, Dr. George E. Thoma, Southwest Medical Center, 3915 Watson Road, St. Louis 9, Missouri. The annual subscription rate is $10 and such requests should be mailed to the publisher, Samuel N. Turiel & Associates, Inc., 430 N. Michigan Ave., Chicago 11, Illinois.

NATIONAL FUND WILL AGAIN AID SCHOOLS

The nation's medical schools this Christmas will again benefit from an unusual program of group giving, whereby a brewing company in the name of its wholesalers donates $12,000 to the National Fund for Medical Education instead of spending that sum on individual presents for its 680 distributors. The contribution will be included in the approximately $3,000,000 to be awarded this year to the medical schools by the Fund in unrestricted, across-the-board grants.

The corporate-giving plan was initiated last year by The Carling Brewing Company of Cleveland, with the cooperation of its distributors. The 1958 contribution totaled $10,000; this year that amount has been increased by $2,000.

In carrying out the plan, medical school deans in six Carling plant areas will each receive from the Fund a check for $2,000. The deans are: James W. Colbert, Jr., M.D., St. Louis University School of Medicine, St. Louis; William N. Hubbard, Jr., M.D., University of Michigan Medical School, Ann Arbor; Joseph M. Hayman, M.D., Tufts University School of Medicine, Boston; George N. Aagaard, M.D., University of Washington School of Medicine, Seattle; Arthur P. Richardson, M.D., Emory University School of Medicine, Atlanta, Ga.; and Douglas B. Bond, M.D., Dean, Western Reserve University School of Medicine, Cleveland.

The Fund, founded in 1949 by Dwight D. Eisenhower, then Columbia University head, former President Hoover, Dr. James B. Conant and other leading educators, channels contributions from industry to the medical schools. Since the first grants were made in 1951, it has distributed $18,668,946.

Special Article

Medical Care of the Veteran

History of Veterans' Administration and Stand of A.M.A.

Prior to 1811 there were no federal laws providing domiciliary or medical care for veterans. In that year Congress established the U. S. Naval Home in Philadelphia, which operated as a general hospital although it was primarily an old soldiers and sailors home. Purely medical benefits for veterans were not available until 1917 when the War Risk Insurance Act was amended to provide, with respect to service-connected conditions, that: "the injured person shall be furnished by the United States such reasonable governmental medical, surgical and hospital services and with such supplies, including artificial limbs, trusses and similar appliances as the Director may determine to be useful and reasonably necessary."

Originally United States Public Health Service hospitals were responsible for providing this care for veterans. In 1921 these hospitals were transferred to the newly created Veterans' Bureau (now the Veterans' Administration).

By 1923 there was a reduction in the number of veterans with service-connected disabilities requesting hospitalization. Since hospital beds were available, Congress authorized the care of veterans of the Spanish-American War, Phillipine Insurrection and the Boxer Rebellion who were suffering from neuropsychiatric or tubercular diseases without reference to service connection. Further liberalizing statutes were passed in the next few years and by 1926 veterans of any war, military occupation or expedition were entitled to hospitalization and medical care regardless of the nature or origin of their disabilities.

The Economy Act of 1933 greatly curtailed the eligibility for medical care, limiting it to men discharged from the service for line-of-duty disabilities and veterans suffering from permanent disabilities, tuberculosis or neuropsychiatric ailments. The following year, however, Congress enacted Public Law 141, 73rd Congress, which authorized hospital care "within the limitations existing in such (V. A.) facilities," without regard to service-connection, for veterans stating they were unable to pay for such care. This was the inauguration of the present non-service-connected care program.

The present law, Title 38 of the United States Code, which went into effect on January 1, 1959, consolidated all laws administered by the Veterans' Administration at the time of its passage. Under Sections 610 and 612 of this law the following groups of veterans are eligible for hospital and domiciliary care and medical treatment:

(1) War-time veterans afflicted with service-connected disabilities;

(2) Any war-time or peace-time veteran who is receiving disability compensation or who would be receiving such compensation if he were not receiving retirement pay; and

(3) War-time veterans afflicted with non-service-connected disabilities if they are unable to pay for hospitalization and treatment and if beds are available.

Listing the groups of veterans eligible for medical care does not present an accurate picture of veterans' health legislation unless the methods of determining "service connection" and "inability to pay" and A.M.A. positions concerning them are also examined.

SERVICE CONNECTED DISABILITIES

A service-connected disability is a mental or physical disease or disability incurred as a result of military service or which, although existing before entry into the armed forces, was aggravated as a result of military service. Veterans afflicted with such disabilities are entitled to treatment at federal expense in Veterans' Administration hospitals, in certain other government hospitals, in private hospitals, or in the offices of private physicians. There has been no disagreement concerning the proposition that free medical care in these situations is proper and just and there have been no substantial suggestions for changes in present legislation.

The official policy of the A.M.A. on veterans' medical care, which is that stated in November 1956 by the House of Delegates, reflected the general agreement in this area by recommending that: "With respect to the provision of medical care and hospitalization benefits for veterans in Veterans' Administration and other federal hospitals that new legislation be enacted limiting such care to veterans with peacetime or wartime service whose disabilities or diseases are service-incurred or aggravated."

Although there is no dispute over the principle that veterans should receive the best possible medical treatment without charge for service-connected ailments and disabilities there is a substantial disagreement concerning the method of determining service connection and the responsibility for supplying medical care in such cases.

Under the present law more than 40 chronic diseases and at least 17 tropical diseases are presumed to be service connected if they become manifest to a degree of 10 per cent or more within one year of separation from service. Multiple sclerosis and acute psychoses are presumed to be service-connected if they occur within two years while active tuberculosis will be so considered if it develops within three years.

The A.M.A. has condemned "legislative presumptions" as unscientific. It has adopted the position that service connection should be determined on the basis of the individual's medical history, not by legislative fiat alone.

Substantial agreement with the A.M.A.'s position was expressed by the President's Commission on Veterans' Pensions (The Bradley Commission). The Commission, which was appointed in 1955, made the following recommendation in its report: "Presumptions of service connection for chronic diseases, tropical diseases, psychoses and multiple sclerosis as now listed should be drawn. . . . Accepted medical principles reasonably and accurately establish the onset of a disease and the disability process. . . ."

Legislative presumptions concerning service-connected disability are not only scientifically inadequate but also have the disadvantage of threatening the entire principle of service connection. If they are extended much farther the concept could be completely nullified. For example, in 1950 Congress enacted, over the veto of the President, Public Law 791, 81st Congress, which provides that Spanish-American War veterans in need of outpatient treatment will be considered as having service-connected disabilities for treatment purposes, regardless of the nature of their disabilities.

HOMETOWN MEDICAL CARE

The Veterans' Administration is authorized to contract with non-federal sources for the provision of medical care for veterans with service-connected disabilities whenever the Administrator considers such action advisable and in the best interest of the patient. Originally the arrangements were made with individual private physicians to provide this care. However, at the end of World War II, because of the great increase in the veteran population and because of concern over the quality of veterans' care, the Veterans' Administration enlisted the aid of organized medicine in setting up a formal program of fee-for-service treatment by private physicians.

The Hometown Medical Care Program is considered by the Veterans' Administration as supplementary to its own outpatient services and is used chiefly in communities where V. A. clinics are not available. Since the law provides payment of transportation costs to V. A. facilities, Hometown Care is usually authorized only when there is a demonstrable hardship to the veteran in traveling to the V. A. facility.

Advantages of the Hometown Care Program has been acknowledged by veterans' groups, the Veterans' Administration, and legislators, as well as the medical profession. From the standpoint of economy and convenience it is better for the veteran to go to a local physician rather than travel some distance to a V. A. clinic. This procedure also has medical advantages to the veteran because it allows him to have his disability treated by the doctor of his choice and the same doctor is responsible for all of his medical needs both service-connected and non-service-connected.

ADMINISTRATION OF HOMETOWN CARE PROGRAM

There are three basic methods of administering the Hometown Medical Care Program. Until the beginning of the 1959 fiscal year they were known as the "designated physician," "direct contract" and "intermediary contract" methods.

Under the "designated physician" plan, the Veterans' Administration regional office contracts with individual physicians directly. The state medical society has no formal role in the program. The physician agrees to accept payments authorized in a standard V. A. "Guide for Charges," he submits his bill to the regional office and is paid directly by that office. Veterans are authorized to obtain specific services from physicians participating in the plan. This method is currently used by fifteen states, the District of Columbia and Puerto Rico. Since the beginning of fiscal 1959 states using this plan are called "states without agreements."

Under the direct agreement plan, the state medical association negotiates an informal agreement with the local regional office. This plan was formerly called "direct contract" and the state association signed the contract with the V. A.'s central office.

The medical society has two main functions under these agreements: they negotiate the fee schedule to be used in the state and they provide a list of physicians who are willing to accept the fees. The V. A. regional office authorizes the physicians directly and pays them directly for their services.

In 1958 there were twenty-four states using direct contract agreements.

In the intermediary contract plan, the medical association participates in the actual administration of the program in addition to taking part in the negotiation of fee schedules. The participation is through a "third party" agency, usually the local Blue Shield plan. The intermediary receives and audits the claims from the individual physicians for forwarding to the V. A. regional office, pays the individual physicians and acts as the review agency for both the physician and the Veterans' Administration.

Currently, nine states have this plan and New York has one which is fairly similar.

The Veterans' Administration contends that this plan is unnecessary and expensive. During contract renegotiations the Veterans' Administration has urged revising the functions and prerogatives attached to this plan. Reports from medical societies which have signed contracts for the 1960 fiscal year indicate that the intermediary's function is being limited to checkwriting and public relations.

NON-SERVICE-CONNECTED DISABILITIES

A non-service-connected disability is any disease or disability which occurs after discharge or one which, though existing before induction or enlistment was not affected by military service. The legal basis for Veterans' Administration care of non-service-connected disabilities is contained in Section 610, Title 38 of the United States Code, which states that any veteran who is unable to pay for hospitalization or domiciliary care may "within the limitations existing in such facilities" receive care at Veterans' Administration facilities, "irrespective of whether the disability, disease or defect was due to service." Although this law did not authorize the building of additional facilities for non-service-connected cases, the Veterans' Administration hospital system has grown from approximately 45,000 operating beds in 1936 to 120,526 beds on June 30, 1958. On November 30, 1957, the Veterans' Administration patient load (V. A. and non-V. A. hospitals) at a given day was 39,230 for service-connected patients and 74,770 for non-service-connected cases. The operating beds available in 1936 would still be adequate to accommodate all service-connected patients. The 75,526 beds which have been added since that time can be justified only by non-service-connected needs.

The American Medical Association's policy toward treatment of non-service-connected disabilities was stated by the House of Delegates in 1956. The Association believes that veterans with such disabilities should provide for their own medical care as does any other citizen, or that they should be local or state responsibilities in the event of medical indigency.

Adoption of the A.M.A. policy would:

(1) Permit greater concentration of the present Veterans' Administration medical and hospital staff on the care of those veterans who most deserve federal care—the veterans with service-connected disabilities;

(2) Save federal tax dollars which are being channeled under the present system into a constantly increasing Veterans' Administration hospital system for a limited group of citizens;

(3) Provide a greater incentive to citizens to provide adequate local hospitals in their communities, which would serve all the people, including veterans and their families;

(4) Halt the constantly increasing drain on paramedical personnel due to the continual increase of federal facilities, and would permit non-federal institutions to staff their institutions more adequately.

McDOWELL STAMP TO BE ISSUED

Postmaster General Arthur E. Summerfield has announced that a 4 cent "Famous American" postage stamp honoring Dr. Ephraim McDowell will be placed on first day sale at Danville, Ky., on December 30, marking the 150th anniversary of the first surgical operation of its kind.

The stamp was designed by Charles R. Chickering of the Bureau of Engraving and Printing. It features a likeness of Dr. McDowell based on a photograph or a print. The wording "U. S. Postage" is arranged across the top of the design and the denomination "4¢" in the lower left hand corner.

Collectors desiring first day covers may send addressed envelopes, together with remittances to cover the cost of the stamps to be affixed, to the postmaster, Danville, Ky.

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President's Page

Missouri Medicine is the journal of the Missouri State Medical Association, the journal of the members of the Association. It is published for the members of the Association and much of the material that appears in Missouri Medicine is furnished by that same membership.

Ralph Perry, M.D.

It is your publication—yours to read, to contribute to, to suggest about to the Editor—yours to criticize or compliment.

In these busy times, doctors do not find the time to prepare manuscripts as they formerly did. Have you had an interesting case, done some reading on some particular phase of medicine that would be of value to other members? Take time to write it and submit it to the Editor.

Medical journals are in an enviable position today. Advertising for state medical journals is sold on a national basis and the medical journals compare favorably with national magazines in the amount of advertising they attract. At the same time, the writing of scientific contributions has not kept pace with the increase in advertising and Missouri Medicine could well carry more scientific articles—and the Editor will welcome submission of such material.

Missouri, I believe, has a good medical journal but you can help make it better.

Ralph Perry

EDITORIALS

Hospital Admissions Rise As Length of Stay Drops

In the last 20 years the rate of hospital admissions in this country has increased greatly for almost all diagnostic conditions. Today's hospital patient, however, usually goes home much sooner.

These contrasting trends in the use of general hospitals were analyzed in *Progress in Health Services*, a monthly statistical bulletin of the Health Information Foundation.

The Foundation compared data from United States Public Health Service studies from 1928 to 1943 with hospital admission data for July 1957-June 1958 derived from the Public Health Services' current National Health Survey.

During the 20 year period, the Foundation reported, hospital utilization increased by about 20 per cent, from 715 to 851 patient days per 1,000 population. The average American now spends almost one day for each year of life in a general hospital.

The trend in utilization results from two factors: a rise of almost 80 per cent in admission rates (from 56 to 99 admissions per 1,000 population) partly offset by a decrease of about one third (from 12.5 to 8.6 days) in the average length of stay per patient.

"Clearly," said the Foundation, "the rise in admissions reflects the growing importance of hospitals for almost all types of medical care, and is a major reason behind recent medical progress. The decline in average length of stay per patient is much the result of new medical knowledge, early ambulation following surgery, new medical and surgical procedures, and new pharmaceutical products."

The increase in admissions resulted largely from the growth in hospitalization for obstetric reasons. Twenty years ago, the Foundation said, less than 40 per cent of all babies born in this country were delivered in hospitals. Now, with infant and maternal mortality at all-time lows, the figure is about 95 per cent. Obstetric cases had little effect on the increase in total days of care, however, since average length of stay per patient dropped from 10.1 to 4.4 days.

The Foundation found that admission rates for two common surgical procedures, tonsillectomies and appendectomies, declined by more than half during the period studied. At the same time, admission rates for most other operative procedures increased; for example, the rates quadrupled for surgical patients with ulcers, hemorrhoids and heart diseases. These changes, the Foundation noted, undoubtedly resulted from the use of modern medical technics such as new surgical procedures and drugs.

Although admissions rose sharply in all adult age groups, the hospitalization rate for children under 15 actually dropped—mainly because of the decline in tonsillectomies and appendectomies.

The Foundation concluded that "by every measure—lower death rates, extended length of life, decreased disability and suffering—the increased use of the general hospital is returning substantial dividends to the American people."

The Drug Addict

It is estimated that there are approximately 46,000 drug addicts in this country today. A recent issue of *Patterns of Disease* gives statistics and the picture of the average addict. It describes the majority as "male, about 25, born and bred in big city slums, emotionally disturbed."

Almost eight out of every 10 of this country's addicts are males and it appears to be principally a problem of youth. As much as 12 per cent of addicts reported in the study were under 21, and an additional six out of every 10 were between the ages of 21 and 30. In one study of 881 new addicts under 21, 86 per cent were between the ages of 18 and 20, while only 13 per cent were from the 17 to 18 age group.

While juvenile delinquency appears to be increasing, juvenile addiction is not. On the contrary, *Patterns of Disease* states that the proportion of 21 and under addicts reported last year—about 12 per cent of the total number—has remained fairly constant for the last five years.

Most of the drug addicts are found in the four big-city states. New York is estimated to have 45 per cent of the total number of active addicts, Illinois is second with 14 per cent and California has 13 per cent. Michigan accounts for about 5 per cent of all addicts.

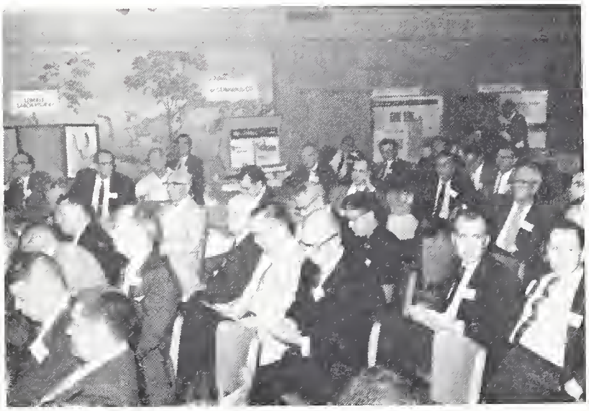
The passing of legislation and enactment of strict narcotics regulations at both the federal and state levels seem to be the principal answers to the problem of the drug addict. It is estimated that the passage of such legislation had resulted in the decline in the number of addicts from one in 400 persons in 1914 to the present relatively low rate of one in every 3,500.

Musings of the Field Secretary

Approximately 85 physicians registered at the Sixth Annual Southeast Missouri Cancer Conference held in Cape Girardeau on Sunday afternoon and evening, October 4. This well organized conference has become an outstanding project of the Cape County Medical Society with considerable assistance tendered by the Missouri Division of the American Cancer Society. This year's session presented an attractive scientific program as follows:

Panelists were seated together.

"Diagnosis and Treatment of Cancers of the Colon," S. W. Arhelger, M.D., Assistant Professor of Surgery, University of Minnesota; "Radioactive Isotopes and Clinical Medicine," D. G. Mosser, M.D., Director, Radiation Therapy Division, University of Minnesota; "Carcinoma of the Thyroid," A. L. Schultz, M.D., Clinical Assistant Professor of Medicine, University of Minnesota Medical School; "Cancer Detection in Practice," Chester Cassel, M.D., Clinical Assistant Professor of Medicine and Gastroenterology, University of Miami, Florida. These papers were given in the afternoon. At their conclusion, a social hour preceded dinner and the evening scientific session which consisted of presentation of cases with panel discussion. The local arrangements committee, which was responsible for the conference, was composed of M. Shoss, M.D., chairman, and Drs. Elrod, Kasten, Kratz, Lovinggood, McGinty, Rapp, Rawlins, and L. R. Seabaugh, members.



The conference convened in the afternoon and evening.

Nine pharmaceutical companies displayed exhibits. In addition to those in attendance from Southeast Missouri, a number of guest physicians from adjacent states took advantage of this interesting and informative program.

CONFERENCE OF PHYSICIANS AND SCHOOLS

The Seventh National Conference of Physicians and Schools, sponsored by the Department of Health Education of the American Medical Association, with W. W. Bauer, M.D., Director, was held in Hotel Moraine-on-the-Lake, Highland Park, Illinois, October 13-14-15. Some 250 people from all over the United States spent three full days discussing important school health problems at this conference. (After all there was little else to be done at the location.)

These conferences are the only national meetings at which official delegates of state medical societies, state education departments and state health departments gather to consider school health problems. It is therefore felt that these meetings are particularly important in furthering inter-professional cooperation and in strengthening school health and physical education programs. State medical societies were earnestly requested to send official representatives to this conference.

E. J. Schwartz, Springfield, Mo., and Guy N. Magness, University City, Mo., were the official representatives of the Missouri State Medical Association. Both are members of the Infant and Child Care Committee, with Dr. Schwartz serving as Chairman. Yours truly attended with them and appreciated greatly the oportunity to sit in on the learned discussions.

The conference membership was divided into seven groups, each group having one chairman and recorder. Dr. Magness served as the recorder of group No. 1. Five well selected questions were presented, with each of the discussion groups spending a specified time in considering each question and presenting their recommendations to the entire conference. These five questions were as follow:

1. Should we establish national norms based on a test or tests of physical performance, and rate children and youth according to such norms?

2. With today's crowded curriculum, how can we find adequate time for health instruction and physical education at the various school levels and how much time is needed?

3. Do periodic health examinations pay off in terms of the medical manpower they require?

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*Thompson, R. E., and Hecht, R. A.: Am. J. Clin. Nutrition 7:311-317 (May-June) 1959.

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News—Personal and Professional

The Atchison County unit of the American Cancer Society had as speaker at a recent meeting **Joseph L. Fisher**, M.D., St. Joseph.

At the election of officers of the medical staff of Deaconess Hospital, St. Louis, **Guerdan Hardy**, M.D., was elected president, and **George E. Scheer**, M.D., was elected president-elect. **John J. Roth**, M.D., was elected vice president, and **Leland E. Hosto**, M.D., secretary-treasurer.

The American Society of Plastic and Reconstructive Surgery honored its president, **Louis T. Byars**, M.D., St. Louis, at a dinner during the annual meeting held in Miami Beach, Florida, in October.

New president of the Missouri Division of the American Cancer Society, elected in October, is **Martyn Schattyn**, M.D., St. Louis.

At an annual conference of the state public affairs committee of the Junior Leagues of Missouri, held October 8 in Kansas City, among speakers was **Addison M. Duval**, M.D., Jefferson City.

Newly elected officers of the medical staff of the Alexian Brothers Hospital, St. Louis, are **Louis T. Litzow**, M.D., president; **John G. Kellett**, M.D., vice president, and **Charles B. Ladd**, M.D., secretary-treasurer.

The Kansas City Claims Association was addressed by **Morton Jacobs**, M.D., Kansas City, on October 5. His subject was "The Man Who Couldn't Walk."

Jasper County Medical Secretaries and Assistants heard **Russell Patterson**, M.D., speak on "The New Drugs" at a meeting in Carthage.

A health advisory council for the Pettis County Nursing Service was recently appointed and **Thomas J. Hopkins**, M.D., Sedalia, has been named a member of the council.

First prize in scientific exhibits at the Mississippi Valley Medical Society meeting in St. Louis went to **Jack M. Martt**, M.D., Columbia. His exhibit was "Mitral Stenosis vs. Mitral Insufficiency."

The 1959 Diabetes Detection campaign in St. Louis will be headed by **Harold K. Roberts**, M.D., St. Louis, as chairman.

The new medical director of the Research Clinic, Kansas City, is **Frank B. Leitz**, M.D., Kansas City.

Governor Blair recently appointed **Carl M. Peterson**, M.D., Kansas City, as a member of the board of curators of Lincoln University.

Musings—Continued

Would examination prior to school entrance, with future examinations dependent on referral by teachers, parents, nurses or others, be a better system?

4. Should we set up health knowledge, attitudes and behavior standards to be reached at each grade level? Should we establish national minimum standards?

5. How can we bring about better application of agreed-upon procedure for classifying pupils for physical education and alleviating the problems of medical excuses?

At the conference dinner session on Tuesday evening, October 13, we were privileged to hear I. H. Flack, Editor, "Family Doctor," Tavistock Square, London, England, who spoke on "Problems of Communication in Health Education." The dinner session on Thursday evening, October 15, was highlighted by two fine presentations, namely; a talk by Mr. Homer C. Wadsworth, Chairman of the President's Citizens' Advisory Committee on the Fitness of American Youth, and a program by the Bluejacket Choir, Great Lakes Naval Training Station.

In addition to the information gained from conferences of this caliber, it is reasonable to state that most of those in attendance will come away with a stimulation to expand efforts toward the promotion of better school health programs back on the state and local level.

While we are on this matter of school health, we are pleased to note that Dr. Guy N. Magness was honored on October 21 at the Annual Banquet in Atlantic City, New Jersey, of the American School Health Association, by the presentation of the William A. Howe Award for "outstanding service in school health for the children and youth of America."

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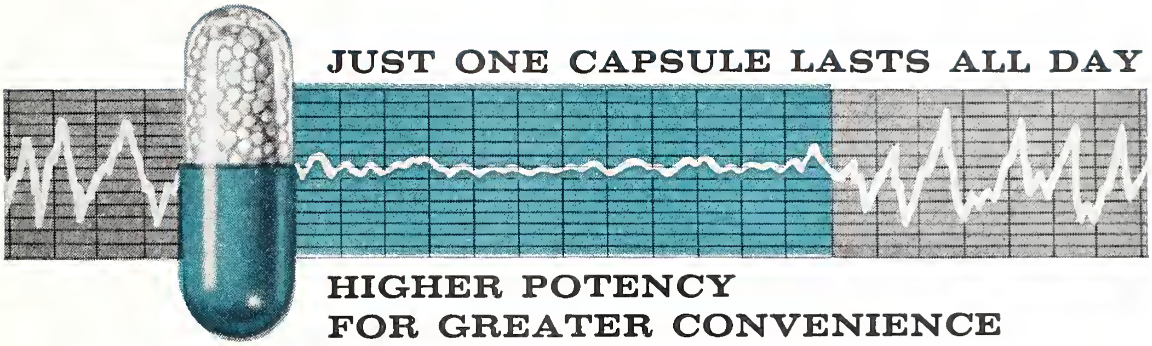

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The Pettis County Medical Society appointed **T. Spencer Hopkins,** M.D., Sedalia, to direct the Diabetic Detection project in Pettis County which was held the week of November 15.

The Macon County Tuberculosis Association reelected **Howard Miller,** M.D., Macon, as vice president at its annual meeting.

A reception was given for **Dr. and Mrs. Orr Mullinax** at State Hospital No. 2, St. Joseph, by employees of the hospital, prior to his taking up his new duties at the Marshall school.

The Poplar Bluff chapter of Licensed Practical Nurses of Missouri heard **S. L. Gernstetter,** M.D., discuss bone surgery, rehabilitation and how to turn the patient in such cases.

"Social Prejudice, a Block in Understanding Others" was the subject of a talk by **George A. Colom,** M.D., Kansas City, given at a meeting of the St. Joseph Mental Health Association in October.

"Two Local Doctors Honored for Half Century of Practice" was the heading of an article in the *Sedalia Democrat* telling of the honoring of **Frank B. Long,** M.D., and **Charles D. Osborne,** M.D., by the Pettis County Medical Society.

Among speakers at a dinner celebrating the anniversary of the Independence Sanitarium were **John R. Green,** M.D., and **Charles F. Grabske,** M.D.

The Central Association of Obstetricians and Gynecologists, at a meeting in Chicago on September 25, elected **Joseph G. Webster,** M.D., Kansas City, vice president.

"Cardiac Arrest" was the subject of a presentation by **Hugh E. Stephenson, Jr.,** M.D., Columbia, before the 18th annual postgraduate program of Yale University School of Medicine late in September.

The Missouri Society for Crippled Children and Adults elected **Richard H. Kiene,** M.D., Kansas City, as president. He succeeds **D. Elliott O'Reilly,** M.D., St. Louis.

Speaker at a September meeting of the Sertoma Club in St. Joseph was **Allen I. Herman,** M.D., St. Joseph.

Members of the Parkade School P. T. A. heard **James C. Denninghoff,** M.D., Columbia, speak on "Your Child's Health" at an October meeting.

The Cape Girardeau Chapter of the Missouri State Association of Licensed Practical Nurses had **Thomas G. Ott,** M.D., Cape Girardeau, as their speaker at their October meeting.

New president of the St. John's Hospital (Springfield) medical staff is **John W. Williams, Jr.,** M.D. **William I. Park,** M.D., was elected president-elect; **Erin M. Dillard,** M.D., secretary, and **Gordon F. Wise,** M.D., treasurer.

Principal speaker at a conference for teachers and community health workers held at Washington University Field House, St. Louis, in the fall was **Guy N. Magness,** M.D., University City.

New chief of the Burge Hospital Medical staff at Springfield is **Charles E. Lockhart,** M.D. Other officers chosen are **Raymond C. Conrad,** M.D., president-elect; **F. Thomas Moseley,** M.D., secretary, and **Bill G. Prater,** M.D., treasurer. **Kenneth E. Knabb,** M.D., was reelected to the executive committee.

Several physicians have been elected officers of county units of the American Cancer Society: **James J. Royce,** M.D., Noel, of McDonald County; **Clarence Pickard,** M.D., Columbia, of Boone County, and **Caryl Potter,** M.D., St. Joseph, of Buchanan County.

"Tissue Reaction to Nasal Implants" was the subject of a paper presented by **William Barry,** M.D., Kansas City, before the American Rhinological Society at a meeting in Chicago in October.

The *AMA News* of November 2 carried a picture and story about the Practical Politics course which members of the Greene County Medical Society are taking.

The Missouri Hospital Association achievement award for exceptional service to his community, its hospitals and his profession was given to **A. E. Spelman,** M.D., Smithville, during the annual meeting in St. Louis in late October.

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SHERRY

Both dry and sweet varieties of Sherry serve as valuable tonics, stomachics and sedatives. The jaded appetite of the aged, the convalescent or the anorexic patient will often respond to a "drop" of Sherry taken as an aperitif.

The chronic invalid, the oldster, the arteriosclerotic and hypertensive patient—all can benefit from its euphoric effect, its ability to relieve tension, reduce apprehension and induce a glowing sense of well-being.

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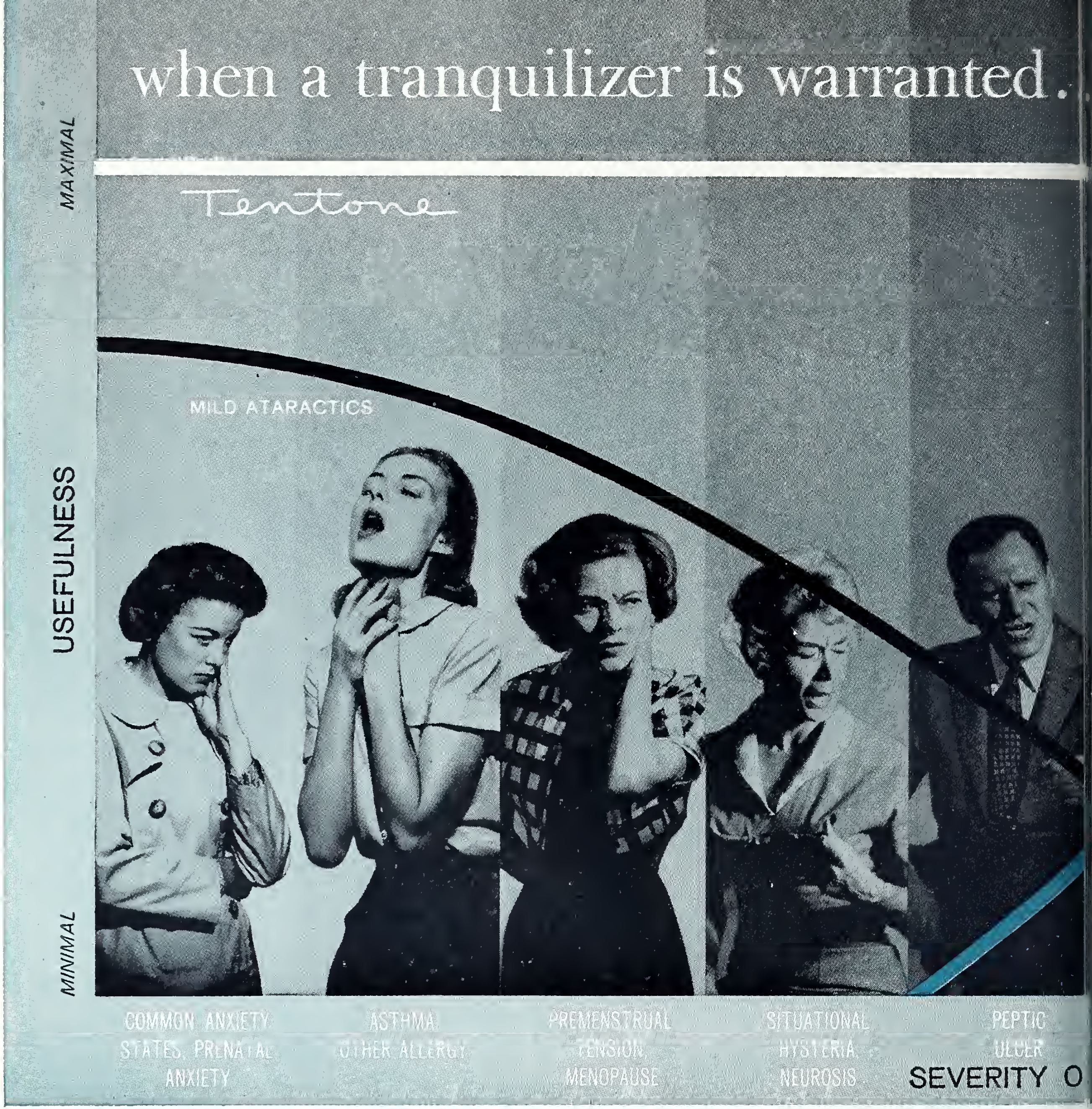
Many relatively insoluble substances can be maintained in stable solution by the buffering action of natural wine. Moreover, the aromatic organic esters normally present in wine provide a pleasant and inexpensive flavoring which makes it unnecessary to add costly, foreign or synthetic extracts.

An extensive bibliography is now available showing the important role of wine in various phases of medical practice. Just write for your copy of "Uses of Wine in Medical Practice." Wine Advisory Board, 717 Market Street, San Francisco 3, California.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osage: Mild to moderate cases—average starting dose, one 10 mg. or one 25 mg. tablet ree or four times daily. *Moderate to severe*—average starting dose, one 50 mg. tablet ur times daily. *Supplied:* 10 mg., 25 mg., and 50 mg. tablets.

Bodi, T., and Levy, H.: Clinical report, cited with permission. 2. Wetzler, R. A., and Phillips, R. M.: Clinical ort, cited with permission. 3. Prigot, A.: Clinical report, cited with permission. 4. Gosline, E., *et al.*: *Am. J. Psychiat.* :939 (April) 1959. 5. Turvey, S. E. C.: Clinical report, cited with permission.

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Councilor District News

FIRST COUNCILOR DISTRICT

DONALD M. DOWELL
CHILLICOTHE, COUNCILOR

Buchanan County Medical Society

The fourth joint meeting of the Buchanan County Medical Society and the St. Joseph Bar Association was held at the Hotel Robidoux in St. Joseph on Thursday night, October 15. A total of 110 doctors and lawyers were present which represents the largest attendance thus far for this special event.

A mock trial was presented as the program with local lawyers and physicians participating. This mock trial concerned a claim for aggravation of a pre-existing heart condition which allegedly worsened following an automobile accident. Certain medical facts were admitted in the proceedings with medical testimony limited to four physicians.

Dr. Donald J. Stallard and Dr. Allen I. Herman were plaintiff's witnesses and Dr. Lucien Ide and Dr. Caryl A. Potter, Jr., were witnesses for the defense. The doctors used this occasion to show that medical witnesses are bound to provide expert testimony based solely on the facts, and a lawyer who calls such a witness to testify on behalf of his client had best before the trial make sure that the questions he asks will bring forth answers in support of his arguments.

A verdict in favor of the defendant was given by the jury, which was composed of an equal number of doctors and lawyers, following deliberation of some five minutes.

William B. Rost, M.D., *Secretary*

Grand River Medical Society

The Grand River Medical Society met in regular session, October 8, 8:00 p.m. at the Strand Hotel in Chillicothe.

There was a good attendance of the members and Auxiliary. After a pleasant social hour, a smorgasbord dinner was enjoyed.

The speaker of the evening was Robert M. Drisko, M.D., orthopedic surgeon, Kansas City, Missouri, who discussed "Low Back Injuries and Ruptured Intervertebral Disk." This subject was well received, and was followed by questions and discussions by the members.

The minutes of the last meeting were read and approved. There being no further business, the meeting was adjourned.

William A. Fuson, M.D., *Acting Secretary*

SECOND COUNCILOR DISTRICT

J. J. WIMP, KIRKSVILLE, COUNCILOR

Chariton-Macon-Monroe-Randolph County Medical Society

The 11th Annual Public Relations Dinner Meeting of the four county medical societies was held at the Moberly Country Club on Thursday night, October 8. Dr. C. C. Weger, Keytesville, President, served as master of ceremonies and the Rev. Karl Koslowski, pastor of the Moberly Zion Lutheran Church gave the invocation. Members of the medical society, their wives and a large number of invited guests were privileged to hear S. C. Sen of New Delhi, India, discuss ancient and modern medicine in his native India and in China.

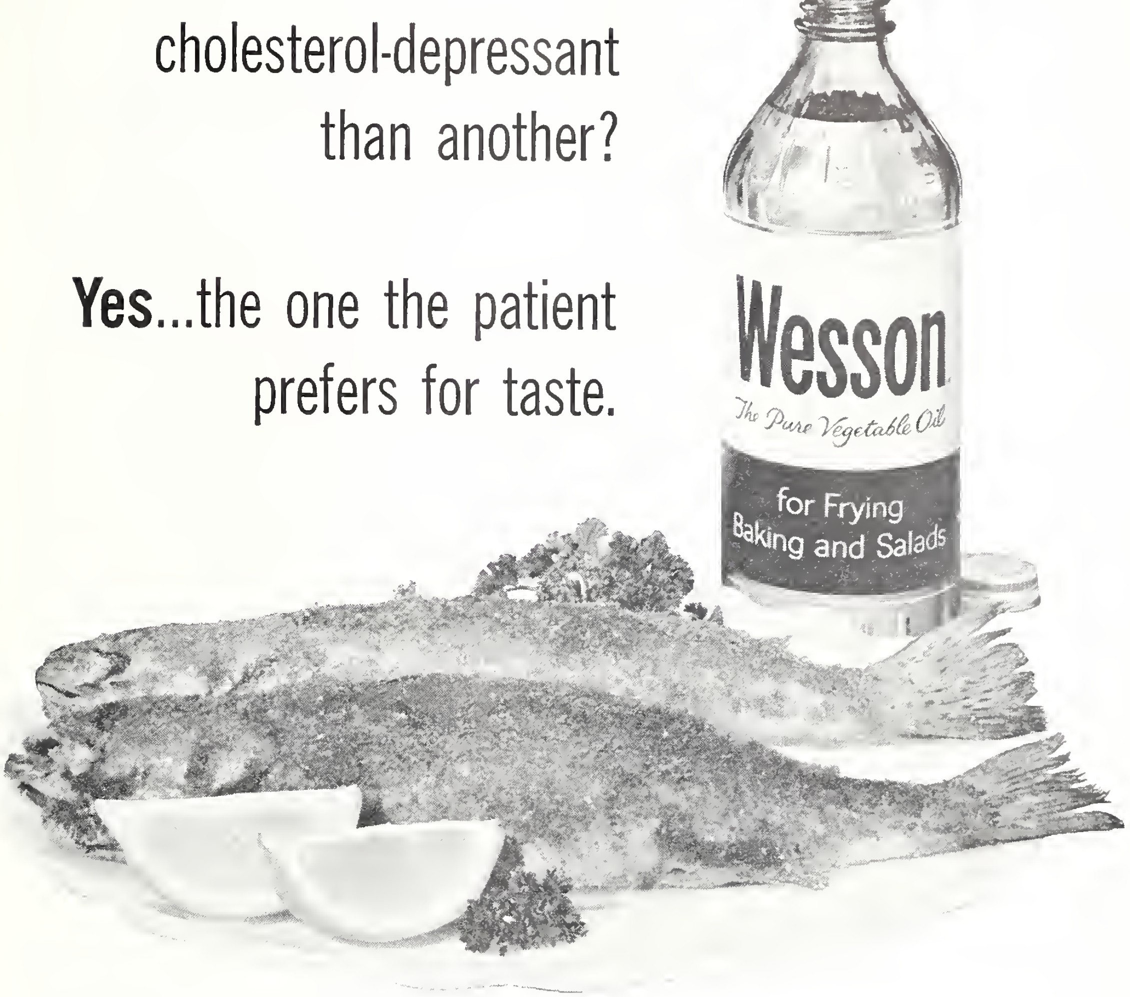
Program chairman Dr. Rowlette, Dr. Sen, and Dr. Baker, secretary.

Dr. Sen, in this country under the auspices of the World Medical Association, recently attended

Dr. Sen spoke on medicine in his native India.

Is one vegetable oil a better cholesterol-depressant than another?

Yes...the one the patient prefers for taste.



No leading vegetable oil can claim superiority over Wesson in its serum cholesterol-depressant effect. As a diet must be eaten to be effective, *the preferred appetite appeal of Wesson* is most important. Through the years, Wesson has been consistently favored over the next selling oil, particularly for flavor (blandness), odor and lightness of color*. Wesson *encourages* the patient to stay on the prescribed diet.

Quality and uniformity you can depend on. Wesson has a poly-unsaturated content better than 50% . Only the lightest cottonseed oils of the highest iodine number are selected for Wesson and no significant variations in standards are permitted in the 22 exacting specifications required before bottling.

Each pint of Wesson contains 437-524 Int. Units of Vitamin E.

Where a poly-unsaturated oil is called for in the diet, Wesson satisfies the most exacting requirements (and the most exacting palates!).

Wesson's Important Ingredients:

Linoleic acid glycerides	50%	to	55%
Phytosterol (predominantly beta sitosterol)	0.4%	to	0.7%
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Never hydrogenated—completely salt free

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conferences on Medical Education at Montreal and Chicago. The speaker stated that it is most difficult to determine whether Chinese or Indian medicine is the older. In both countries there is presently a conflict between ancient and modern medical practice. Dr. Sen stated that anyone can practice medicine in India and patients in India do much shopping around for medical care and in many cases wind up going to whatever physician promises the most from a cure standpoint. There are no laws regulating doctors' licensure and training in India such as we have in the United States. In too many cases medical ethics is something unknown.

Friends as well as members attended the meeting.

Dr. Sen explained that surprisingly enough some of the older medical practices carried on in India today are effective and are being carefully studied in relation to modern medical science.

One hundred forty people were in attendance at the meeting. Dr. A. P. Rowlette, of Moberly, is chairman of the Program Committee which secured this unusually fine program.

Josephine Baker, M.D., *Secretary*

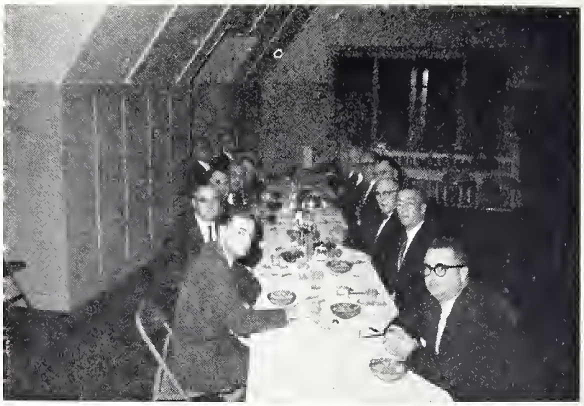
FOURTH COUNCILOR DISTRICT

PAUL R. WHITENER, ST. LOUIS, COUNCILOR

Lincoln-St. Charles County Medical Society

A dinner meeting of the Lincoln-St. Charles County Medical Society was held at Station Duquette in St. Charles, on Tuesday night, October 27. The evening festivities began with a social hour followed by dinner and then the scientific program.

Willard Bartlett, M.D., St. Louis, spoke on "Office Procedures in the Diagnosis and Management of Thyroid Disorders." Numerous questions were asked by the audience during the discussion.



Dinner preceded the scientific program.

Twenty physicians were in attendance to hear this interesting and informative presentation.

Paul Rother, M.D., *Secretary*

EIGHTH COUNCILOR DISTRICT

W. W. TILLMAN, SPRINGFIELD, COUNCILOR

Green County Medical Society

The regular meeting of the Greene County Medical Society was held October 23, at 6:30 p.m. at the Kentwood Arms Hotel with 41 members and three guests present. The President, Dr. J. G. Siceluff, presided.

Upon motion by Dr. Lurie, seconded by Dr. Ashley, the minutes of the September 25 meeting were approved as published in the *Bulletin*.

Dr. Siceluff publicly commended Dr. Durward Hall on his election to the presidency to the Missouri State Chamber of Commerce.

A report from the Necrology Committee concerning the death of Dr. James H. Fulbright, Past President, and Honor Member of the Society since 1939, was received. Services were held at the National Avenue Christian Church, 3:00 p.m., Wednesday, October 21.

The report of the Constitution and By-Laws Committee proposing the amendments to the Constitution and By-Laws of the Society and presenting for adoption a Constitution and By-Laws for the Greene County Medical Society Foundation was brought up for discussion. It was explained that the report had been published in full in both the September and October 1959 *Bulletins* of this Society and that mimeographed copies of the report had been distributed to the membership at both meetings. Following discussion and upon motion by Dr. Crawford, seconded by Dr. Kolze, the report and recommendations of the Committee were approved as presented.

CHOICE THERAPY FOR THE "OLDER" PATIENT WITH MILD TO MODERATE HYPERTENSION

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Veratrite now contains cryptenamine which acts centrally to produce a gradual fall in blood pressure, yet improves circulation to vital organs, relieves dizziness and headache, and imparts a distinct sense of well-being. Furthermore, Veratrite achieves its effects with unusual safety and without annoying side effects.

Each Veratrite tabule contains: Cryptenamine (tannates), 40 C.S.R.* Units; Sodium nitrite, 1 gr.; Phenobarbital, ¼ gr. Dosage: 1–2 tabules t.i.d., preferably 2 hours after meals.

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Dr. Walter W. Tillman, Jr., 8th District Councilor, reported on the September 26-27 meeting of the Council of the Missouri State Medical Association. Dr. Tillman briefly discussed current legislative activities, the financial status of the Association and other items discussed at the meeting.

The President presented Dr. Robert Stewart, program chairman for the evening, who introduced Dr. John A. Pierce, assistant professor of Medicine at the University of Arkansas Medical Center, Little Rock, Arkansas, who discussed "Current Concepts of Emphysema."

Following Dr. Pierce's discussion, Dr. Siceluff expressed appreciation to him for his excellent presentation and to Drs. Stewart, Prater and Ivy for making arrangements for the program of the evening.

The President expressed special appreciation to the firm of Merck, Sharp and Dohme for providing the expenses for the speaker of the evening as part of their postgraduate medical education program.

Dr. Siceluff announced that the program for the November 27 meeting will be Herbert Weener, M.D., professor of pediatrics and head of the virus research laboratory at the University of Kansas Medical Center who will discuss "Polio-Kansas City, 1959." Drs. Overend, Thomasson and Clayton are in charge of the program.

There being no further business, the meeting was adjourned.

Bruce Lemmon, Jr., M.D., *Secretary*

TENTH COUNCILOR DISTRICT

BEN M. BULL, IRONTON, COUNCILOR

Butler-Ripley-Wayne County Medical Society

The Butler-Ripley-Wayne County Medical Society met at the Northwold Resturant for a dinner meeting on the 21st of October. The meeting was well attended, there being 17 members present.

A previously proposed amendment to the constitution was withdrawn by Dr. Lester Harwell, who made the proposal at the previous meeting.

Dr. James Turner and Dr. William Turner of Poplar Bluff, were accepted unanimously by transfer into the local medical society. There was a good deal of discussion about the necessity for better attendance in medical society meetings and methods for achieving this.

As a result, a questionnaire is being sent to each member as to the type of program they would like and would attend. This questionnaire is to be handed over to a program committee appointed by the President for their consideration in planning future programs.

The meeting was adjourned at 9:45 p.m.

E. T. Hansbrough, M.D., *Secretary-Treasurer*

Dunklin County Medical Society

A joint dinner meeting of the Dunklin, Pemiscot, Butler-Ripley-Wayne and Semo County Medical Societies was held at the Cotton Boll Hotel, Kennett, Tuesday night, October 13.

Following an enjoyable social hour and fine dinner, the group was privileged to hear an address by Addison Duval, M.D., Jefferson City, Director of the Missouri Division of Mental Diseases. Dr. Duval spoke on, "Missouri's Mental Health Program." In his talk he stated that he is confident Missouri is now ready to move forward in the field of mental health and that the citizens of the state want a sound, effective mental health program.

He pointed out that there is still considerable overcrowding in our state mental hospitals and that the National Association of Mental Health shows Missouri below the national average in all but one field of the 13 different fields of mental health rating. In the rating of professional staff in relation to the number of mental patients, the state ranks 45th out of 48, not including our latest two states. He said that the two biggest problems he has faced in Missouri since taking over his position here have been; (1) finding sufficient trained personnel, and (2) attempting to reduce the overcrowding of patients. Dr. Duval said that considering the 12,000 patients in the five state hospitals in relation to the present available accommodations, there are 3,900 too many patients for proper treatment. He further stated that at the two state training schools at Marshall and St. Louis there are 2,350 youths. Considering this number, there are approximately 900 too many in order to render proper care and treatment to all.

In addition, he said, to the over-crowding in these schools there are 600 acute cases awaiting entry.

Another problem confronting the state he explained is the large number of non-mentally ill patients in the five state hospitals who should be cared for elsewhere. These include mentally retarded persons who should not be in the environment of a mental hospital.

In addition to the physicians present, distinguished guests were: State Representative Charles B. James, Clarkton; State Senator John W. Noble, Kennett; and Mr. Jack Stapleton of the *Daily Dunklin Democrat* of Kennett.

E. L. Spence, M.D., *Secretary*

Mineral Area County Medical Society

E. A. Powell, M.D., urologist, St. Louis, spoke at a meeting of the Mineral Area County Medical Society at the State Hospital in Farmington on Thursday night, October 22. The subject of his talk was, "Prostatic Carcinoma."

Tetracycline-Triple Sulfa Combination (TETREX® c̄ T/S) in the Treatment of INFECTION

It is generally agreed that it is ideal to withhold antibiotic and chemotherapeutic drugs until after sensitivity tests show which antibacterial agent will be most effective. But very often, in actual practice, the physician knows that delay in starting antibacterial treatment may be detrimental to the welfare of his patient. He must then select the therapy to meet the most serious and immediate threats to the patient.

Why Combination Therapy?

Certain infections do not respond as well to a single agent as to a combination. *Hemophilus influenzae* infections, which are frequent in children, are a particularly serious threat to infants and children up to about 3 or 4 years of age since they have not yet built up any appreciable immunity. Serious complications such as influenzal pneumonia, empyema, or meningitis may develop, especially in this age group. In fact, except for those periods when meningococcal meningitis is epidemic, *H. influenzae* is the most frequent cause of meningitis.[1] This gram-negative organism is highly susceptible both to the tetracyclines and to the sulfonamides. Even in severe infections, therapeutic failure can be virtually eliminated by giving sulfonamides plus tetracycline.[1] These two agents together constitute the treatment of choice, and give better results than either alone.[2]

Sulfonamides remain the drugs of choice for all meningococcal infections, including meningitis. They readily penetrate the blood-brain barrier and pass into the cerebrospinal fluid in good concentrations.[3] In treating overwhelming meningococcal infections, and complicating infections of the upper respiratory tract caused by other organisms, the addition of tetracycline to sulfas can be valuable.[4]

In recent years the sulfonamides have again been prescribed more and more frequently. In certain serious infections, better results can be obtained with a combination of antibiotic and sulfonamide than with either drug alone (e.g., severe pneumococcal pneumonia or pneumococcal meningitis[5]). Furthermore, mixed infections, to which young children are particularly susceptible, often respond only to combination therapy such as tetracycline with sulfonamides (TETREX c̄ T/S).

Why Triple Sulfas?

Some sulfonamides, though therapeutically useful, frequently crystallize and cause renal damage. Sulfonamide mixtures are designed to prevent this effect. It is known that different substances can coexist in solution without interfering with each other's solubility. In such a solution each component behaves as if it alone were present. Thus, a much larger total amount of sulfonamide can exist in the urine without precipitating if a mixture is administered than if the same amount of only one compound is given.

Similarly, there is less danger of hypersensitivity with mixtures. The incidence of sensitization varies directly with the dosage and is limited to the particular sulfa given. Simultaneous use of several sulfa compounds, each in partial dosage, tends to keep each drug below its own sensitization level.[3] As with all sulfonamides, it is advisable to check for possible blood dyscrasias, rash, or renal toxicity during extended administration.

TETREX c̄ T/S, by combining only 167 mg. each of sulfadiazine, sulfamerazine, and sulfamethazine, practically eliminates serious renal damage and sensitization reactions due to sulfonamides while retaining the therapeutic efficacy of the total dose.

TETREX c̄ T/S can be administered with confidence in all severe and mixed infections due to tetracycline-sensitive and sulfonamide-sensitive organisms, including infections of the upper respiratory, urinary, and gastrointestinal tracts.

References: 1. Alexander, H. E.: The hemophilus group. In: Dubois, R. J.: Bacterial and Mycotic Infections of Man. Ed. 3, Philadelphia, J. B. Lippincott Co., 1958, p. 470ff. 2. Goodman, L. S., and Gilman, A.: The Pharmacological Basis of Therapeutics. Ed. 2, New York, The Macmillan Co., 1956, pp. 1322-1323. 3. Beckman, H.: Drugs — Their Nature, Action, and Use. Philadelphia, W. B. Saunders Co., 1958, pp. 527-528. 4. Dingle, J. H.: Meningococcal infections. In: Cecil, R. L., and Loeb, R. F.: A Textbook of Medicine. Ed. 9, Philadelphia, W. B. Saunders Co., 1955, p. 196ff. 5. Goodman, L. S., and Gilman, A.: The Pharmacological Basis of Therapeutics. Ed. 2, New York, The Macmillan Co., 1956, p. 1308.

TETREX® c̄ T/S

Antibiotic-triple sulfa combination in a palatable, cherry-flavored syrup.

Each 5 ml. teaspoonful contains:

Tetracycline (ammonium polyphosphate buffered equivalent to tetracycline HCl activity)	125 mg.
Sulfadiazine	167 mg.
Sulfamerazine	167 mg.
Sulfamethazine	167 mg.

This suspension may be stored at normal room temperature.

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In his presentation he discussed, among other things, the uses of radioactive gold in the treatment of prostatic cancer. There was considerable audience participation throughout Dr. Powell's talk.

Dr. Powell addressed the group.

Mr. Ray McIntyre, Field Secretary of the Missouri State Medical Association, was present and spoke briefly on State Association matters. Fifteen physicians were in attendance.

George L. Watkins, M.D., *Secretary*

Pemiscot County Medical Society

A meeting of the Pemiscot County Medical Society was held September 10. The meeting was called to order by the President, Dr. Aquino, with the following members being present: Drs. Aquino, Bryant, Cain, Caldwell, O. W. Cook, Gordon and John Duckworth, Gubin, McKaskle, Morris, Shirey, Smith, L. B. and Andrew Painter, Acuff and Grable.

Under new business, the secretary requested information as to the 1960 dues. A general discussion was held and the motion was made and carried that the county dues be increased to $10.00 per year.

A letter was read by the Secretary, addressed to the Secretary, from the President of the Missouri Society of Pathologists. Some discussion of this letter took place; however, no definite action was taken.

Some discussion was entered into concerning newspaper advertisements in the *Dunklin County Democrat* by a doctor advertising his skills. After some discussion, a move was made, seconded and voted on to the effect that the Secretary-Treasurer write a letter concerning the Pemiscot County Society's displeasure with this practice, and the Secretary was directed to mail this letter to the Secretary-Treasurer of the Dunklin County Medical Society.

Following this, a move to adjourn was made and the motion carried.

John K. Duckworth, M.D.,
Secretary-Treasurer

DEATHS

Hogan, Frank E., M.D., Mound City, a graduate of Central Medical College, 1903; member of Nodaway-Holt-Atchison-Gentry-Worth Counties Medical Society; aged 82; died September 26.

O'Brien, Raymond W., M.D., Kansas City, a graduate of Kansas University School of Medicine, 1943; member of Jackson County Medical Society; aged 42; died September 29.

Finnegan, Frank R., M.D., St. Louis, a graduate of St. Louis University School of Medicine, 1920; member of St. Louis Medical Society; aged 65; died October 10.

Teneglia, Eutimio D., M.D., St. Louis, a graduate of St. Louis University School of Medicine, 1928; member of St. Louis County Medical Society; aged 58; died October 12.

Bristow, Arthur S., M.D., Princeton, a graduate of Rush Medical College, 1917; member of Grand River Medical Society; Past President of the Missouri State Medical Association; aged 65; died October 15.

Erlanger, Herman, M.D., St. Louis, a graduate of Washington University School of Medicine, 1937; member of St. Louis Medical Society; aged 47; died October 15.

Fullbright, James H., M.D., Springfield, a graduate of Kentucky School of Medicine, 1890; member of Greene County Medical Society; aged 92; died October 18.

Locker, George, M.D., Iantha, a graduate of St. Louis University School of Medicine, 1895; member of Barton-Dade County Medical Society; aged 88; died October 19.

Ellis, Coburn H., M.D., Garden City, a graduate of University of Nebraska College of Medicine, 1933; member of West Central Counties Medical Society; aged 55; died October 24.

Ferguson, Eugene H., M.D., Kansas City, a graduate of Rush Medical College, 1924; member of Jackson County Medical Society; aged 63; died October 27.

McNamee, Owen J., M.D., St. Louis, a graduate of St. Louis University School of Medicine, 1921; member of St. Louis Medical Society; aged 62; died October 30.

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Each coated tablet (pink) contains:
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Dosage: One tablet taken one-half
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New Members

Phillip S. Alberts, M.D., 44th & Nichols Parkway, Kansas City, is a new member of the Jackson County Medical Society. Dr. Alberts is a native of Nebraska, received his preliminary education in Nebraska, and his M.D. degree from the University of Nebraska College of Medicine in 1958. He is serving a residency at St. Luke's Hospital, Kansas City.

Frank V. Apicella, M.D., 5544 Pershing Ave., St. Louis 12, became a member of the St. Louis Medical Society October 4, 1959. Dr. Apicella is a native of Massachusetts, received his preliminary education in Massachusetts, and his M.D. degree from St. Louis University School of Medicine in 1958. He is serving a residency at St. Mary's Hospital, Clayton.

Robert J. Bareis, M.D., Marshfield, became a member of the Webster County Medical Society on September 17, 1959. Dr. Bareis is a native of Wisconsin, received his preliminary education in Missouri, and his M.D. degree from the University of Missouri School of Medicine in 1958.

Charlotte M. Brewster, M.D., Psychiatric Receiving Center, Kansas City, is a new member of the Jackson County Medical Society. Dr. Brewster is a native of Colorado, received her preliminary education in Colorado, and her M.D. degree from the University of Colorado School of Medicine in 1950.

James L. Brown, M.D., 415 Pine St., St. Louis 2, became a member of the St. Louis Medical Society on October 4, 1959. Dr. Brown is a native of Missouri, received his preliminary education in Missouri, and his M.D. degree from St. Louis University School of Medicine in 1944. He interned at U. S. Naval Hospital, Oakland, California, and served a residency at St. Vincent's Hospital, St. Louis.

Alfred A. Caruso, M.D., 1222 McGee St., Kansas City, became a member of the Jackson County Medical Society. Dr. Caruso is a native of New York, received his preliminary education in Pennsylvania, and his M.D. degree from the University of Rome, School of Medicine, Rome, Italy, in 1955. He interned at St. Francis Hospital, Bronx, New York, and served a residency at Baptist Memorial Hospital, Memphis, Tennessee.

Phillip Comens, M.D., 6500 Chippewa St., St. Louis, became a member of the St. Louis Medical Society on October 4, 1959. Dr. Comens is a native of Missouri, received his preliminary education in Missouri, and his M.D. degree from Washington University School of Medicine, St. Louis, in 1951. He interned at Menorah Hospital, Kansas City.

William S. Coxe, M.D., 600 S. Kingshighway, St. Louis 10, became a member of the St. Louis Medical Society on October 4, 1959. Dr. Coxe is a native of Virginia, received his preliminary education in Virginia, and his M.D. degree from Johns Hopkins School of Medicine in 1949. He interned at Johns Hopkins Hospital, Baltimore, Maryland.

John M. Grant, M.D., 114 N. Taylor Ave., St. Louis 8, became a member of the St. Louis Medical Society on October 4, 1959. Dr. Grant is a native of Missouri, received his preliminary education in New Jersey, and his M.D. degree from Washington University School of Medicine, St. Louis, in 1954. He interned at Strong Memorial Hospital, Rochester, New York.

Robert N. Hooper, M.D., Plaza Broadway Bldg., Kansas City, is a new member of the Jackson County Medical Society. Dr. Hooper is a native of Kansas, received his preliminary education in Kansas, and his M.D. degree from the University of Kansas School of Medicine in 1953. He served a residency at St. Luke's Hospital, Kansas City.

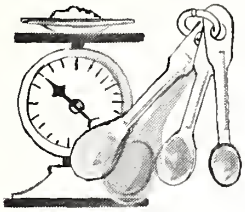
Azeez V. Khayat, M.D., 600 S. Kingshighway, St. Louis 10, became a member of the St. Louis Medical Society on October 4, 1959. Dr. Khayat is a native of Palestine, received his preliminary education in Beirut, Lebanon, and his M.D. degree from the National University of Ireland, Dublin, in 1958. He interned at Flower Hospital, Toledo, Ohio.

Alex A. McBurney, M.D., U. S. Naval Hospital, Bremerton, Washington, is a new member of the Saline County Medical Society. Dr. McBurney is a native of Kansas, received his preliminary education in Kansas, and his M.D. degree from the University of Kansas School of Medicine in 1958.

Richard P. Parsons, M.D., 5525 Enright, St. Louis 12, became a member of the St. Louis Medical Society on October 4, 1959. Dr. Parsons is a native of Missouri, received his preliminary education in Missouri, and his M.D. degree from Washington University School of Medicine, St. Louis, in 1958. He interned at St. Luke's Hospital, St. Louis.

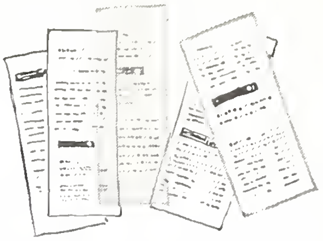
Eugene G. Petersen, M.D., 6644 N. Oak St. Trfwy., Kansas City, became a member of the Clay County Medical Society on September 29, 1959. Dr. Petersen is a native of Missouri, received his preliminary education in Kansas, and his M.D. degree from the University of Kansas School of Medicine in 1957.

John F. Porterfield, M.D., University of Missouri Medical Center, Columbia, became a member of the Boone County Medical Society on October 1, 1959. Dr. Porterfield is a native of Arkansas, received his preliminary education in Missouri, and

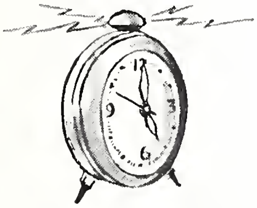


Measured Amounts

Fitting Casseroles

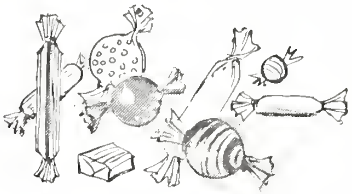


Food Exchange List



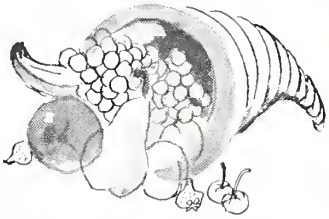
Punctual Meals

Light Snack

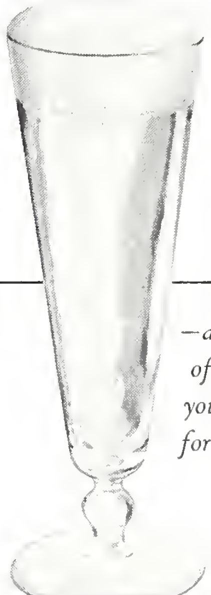


Safety Measure

Low-Calorie Nibbles



Varied Choice



—and a glass of beer, with your consent, for a morale-booster

A few suggestions to help the diet fit your patient's personal preferences and way of life

The Diabetic Diet

A measured diet is vital. Portions should be served in dishes that fit the serving. A small portion on a large plate is not a happy prospect. A food exchange list provides variations in diet. Insulin demands food with the urgency and regularity of an alarm clock.

If dinner is late, suggest a light snack at the usual mealtime with corresponding caloric reduction in the delayed meal. Hard candies do well as a precaution against insulin reaction. Plan low calorie wafers when others nibble canapés or chocolates. Above all, give your patient a variety of his food preferences.

And with a glass of beer*—at your discretion—your patient will find his diet interesting and ample without straying from instructions.

*Carbohydrate 9.4 Gm; Protein 0.8 Gm; Calories 104/8 oz. (Average of American Beers)

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From the Medical Schools

WASHINGTON UNIVERSITY

Grants

Washington University School of Medicine has received $1,384,562 in new, supplemental and renewal grants from the United States Public Health Service. Largest new research grants of $50,513 and $50,514 were awarded Dr. Oliver H. Lowry, professor and head of the department of pharmacology, for remodeling and equipping research space in that department.

Dr. Bernard Becker, professor and head of the department of ophthalmology received $39,204 to establish methods for finding early cases of glaucoma.

A $21,853 grant to Dr. Jay Martin Enoch, research instructor in ophthalmology, will be used for a study of the causes of reduced visual function.

Dr. Falls B. Hershey, associate professor of clinical surgery, received $17,036 for a study of normal and malignant breast cells.

Dr. Paul E. Lacy, assistant professor of pathology, was awarded $14,732 to study the enzyme systems of isolated beta cells in diabetic and normal animals to determine how these cells form, store and release insulin into the blood stream and to search for possible defects in these activities in patients with diabetes mellitus.

A $6,087 grant to Dr. W. Stanley Hartroft, Mallinckrodt professor and head of the department of pathology, will be used as a postdoctoral foreign research fellowship for Dr. Jose M. Monserrat.

Dr. Justin J. Cordonnier, professor of urology, was awarded $3,162 for an investigation and follow-up study of cancer of the urinary bladder treated by radical surgery.

A supplemental research grant of $9,970 to Dr. John M. Kissane, instructor in pathology, will be used to purchase major items of permanent equipment for a microscopic study of the chemistry of juxtaglomerular cells.

Dr. Hugh Chaplin, assistant professor of medicine, received a supplemental grant of $402.

New miscellaneous grants totaling $21,515 were awarded Dr. Edward W. Dempsey, professor and head of the department of anatomy; Dr. Herman Eisen, professor of medicine in dermatology; Dr. Robert K. Crane, associate professor of biological chemistry; Dr. Albert Roos, associate professor of physiology and of physiology in surgery. These grants will be used for various research fellowships and supplies.

Dr. Carl Moyer, Bixby professor and head of the department of surgery, received a new grant of $43,200 to be used for the graduate training program in research surgery. Renewal training grants from the U. S. Public Health Service totaled $276,397. These grants will support graduate training in diabetes, metabolic diseases and pharmacology; training programs in hematology, ophthalmology, otolaryngology, neurology, cancer and cardiovascular diseases and research training in experimental pathology.

Medical School staff members received $829,977 in renewal grants for research in the departments of anatomy, biological chemistry, internal medicine, ophthalmology, otolaryngology, pathology, pediat-

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New Members—Continued

his M.D. degree from Washington University School of Medicine, St. Louis, in 1958. He interned at St. Louis City Hospital, St. Louis.

Herman Shyken, M.D., Ellis Fischel Cancer Hospital, Columbia, is a new member of the St. Louis Medical Society. Dr. Shyken is a native of Nebraska, received his preliminary education in Nebraska, and his M.D. degree from the University of Nebraska College of Medicine, in 1954. He interned at Jewish Hospital, St. Louis, and served a residency at Ellis Fischel Cancer Hospital, Columbia.

W. R. Stevens, M.D., Willow Springs, became a member of the South Central Counties Medical Society on August 26, 1959. Dr. Stevens is a native of West Virginia, received his preliminary education in Alabama, and his M.D. degree from the Medical College of Virginia in 1940.

Francis S. Walker, M.D., 4161 Lindell Blvd., St. Louis 8, is a new member of the St. Louis Medical Society. Dr. Walker is a native of Ohio, received his preliminary education in Ohio, and his M.D. degree from St. Louis University School of Medicine in 1951. He interned at Orange Memorial Hospital, Orlando, Florida, and served a residency at University Hospitals, Iowa City, Iowa.

William E. White, M.D., Argyle Bldg., Kansas City, is a new member of the Jackson County Medical Society. Dr. White is a native of California, received his preliminary education in Oregon, and his M.D. degree from University of Kansas, in 1957.

Philip H. Wolfram, M.D., Smithville, became a member of the Clay County Medical Society on September 29, 1959. Dr. Wolfram is a native of California, received his preliminary education in Texas, and his M.D. degree from the University of Texas School of Medicine in 1958.

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rics, pharmacology, physiology, preventive medicine, psychiatry and neurology, and surgery, and in the divisions of cancer research and gerontology. Awards were made to: Drs. Bernard Becker, Harvey R. Bernard, George Bishop, Neal S. Bricker, David H. Brown, Harvey R. Butcher, Hugh Chaplin, Paul A. Cibis, Marguerite A. Constant, Walter P. Covell, E. V. Cowdry, Edward W. Dempsey, Carl Frieden, David Goldring, Helen T. Graham, Stanley F. Hampton, W. S. Hartroft. Drs. Arthur Hess, F. Edmund Hunter, Morris K. King, David M. Kipnis, John E. Kirk, John M. Kissane, Frederick W. Klinge, Allen P. Kippel, Paul E. Lacy, William M. Landau, Kyu T. Lee, Oliver H. Lowry, Blake W. Moore, Carl V. Moore, Carl A. Moyer, Niromichi T. Narahara, Charles H. Nicolai. Also to: Drs. Joseph W. Noah, James L. O'Leary, H. Mitchell Perry, Jr., Robert Rainey, Lillian Recant, Albert Roos, Ben Senturia, Sol Sherry, John R. Smith, Arthur H. Stein, Jack Strominger, D. C. Tosteson, T. E. Weischelbaum, and Harvey L. White.

Lectures

Three Washington University School of Medicine staff members participated in the 28th annual meeting of the American Academy of Pediatrics held in October in Chicago. Dr. John R. S. Shields, associate professor of anesthesiology, discussed the use of "frozen sleep" for treatment of cancer, schizophrenia and heart surgery. During scientific round table discussions Dr. Alexis F. Hartmann, professor and head of the department of pediatrics, and Dr. Hulda J. Wohltmann, assistant professor of periatrics, spoke on diabetes.

During October at Washington University Medical School, Dr. John H. Lawrence, professor of medical physics at the University of California, Berkeley, discussed clinical and metabolic studies after alpha particle hypophysectomy. He was guest of the departments of radiology and neurology. A movie, "Cyclotron Irradiation of the Pituitary," was shown. Dr. Lawrence is director of Donner Research Laboratory and Donner Pavilion at the University of California.

Dedication

U. S. Senator Stuart Symington was the main speaker at the formal dedication ceremony of the Irene Walter Johnson Institute of Rehabilitation October 29 at Washington University-Barnes Hospital Medical Center. The ceremony was in the Medical School auditorium, 4580 Scott St. Mr. James Lee Johnson represented the family of the late Mrs. Irene Walter Johnson, who was primary donor of funds for the $800,000 Institute. Mrs. Johnson was the widow of Oscar Johnson, president of International Shoe Company at the time of his death in 1916. Participating in the dedication were Mr. Basil O'Connor, president of the National Foundation; Senator Albert Spradling of

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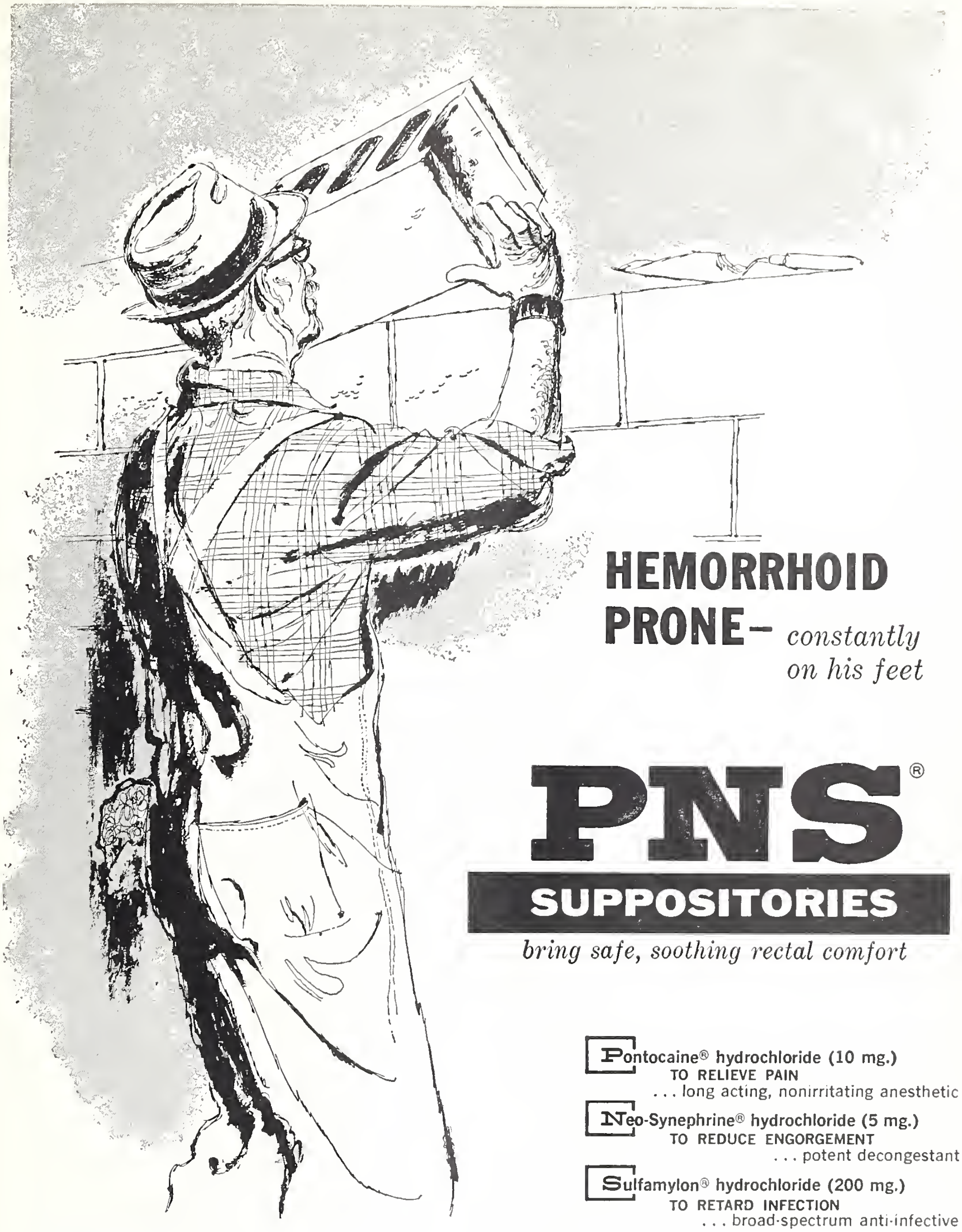

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Missouri; Judge James M. Douglas, chairman of the Washington University Board of Directors; Washington University Chancellor Ethan A. H. Shepley and Dean Dempsey. Invocation was given by Rev. W. Sherman Skinner. A tour of the Institute, which is located at 509 S. Euclid Avenue, between the Washington University Clinics building and McMillan Hospital, followed the formal ceremony. First patients were admitted to the new building on October 1. Services of the Institute are coordinated through the Department of Preventive Medicine and Public Health. Dr. Robert E. Shank is Danforth professor and head of the department. Dr. Eric Reiss is director of the Institute.

The new structure is two stories high and features a two-story glass façade fronting the building. Accommodations are provided for up to 100 patients per day with comprehensive rehabilitation services for both ambulatory and hospitalized patients. In addition to funds provided by the Johnson estate, a federal grant of $317,080 was made under terms of the Hill-Burton Act. The National Foundation and the Office of Vocational Rehabilitation have provided support for teaching programs.

Elections

Dr. James Barrett Brown, professor of clinical surgery, has been named vice president of the American College of Surgeons for 1960. Election took place at the annual fall meeting of the College, held this year at Atlantic City. Dr. Jack Davies, professor of anatomy, has been elected vice chairman of the Missouri Section of the Society for Experimental Biology and Medicine. Dr. H. L. White, professor and head of the department of physiology, was named councilor of this organization.

UNIVERSITY OF MISSOURI

Meetings and Talks

On September 29, the Central Missouri Hospital Council held its regular meeting in the University of Missouri Medical Center Auditorium.

The Boone County Medical Society met October 6 in the Medical Center Auditorium, during which time a film on "Eye Bank and Corneal Transplant" was discussed by Dr. John Buesseler, Professor of Ophthalmology of the Department of Surgery.

Dr. Lester R. Dragstedt, M.D., Ph.D., formerly professor and chairman of the department of surgery at the University of Chicago, visited the Medical Center on October 9 and 10, 1959. During his visit, Dr. Dragstedt spoke to a combined group of the faculty, house staff and medical students on "The Pathogenesis of Peptic Ulcer" and the following morning spoke at the Saturday morning Residents' Hour Breakfast, reviewing many of the facets in the history of surgery in Chicago.

The Missouri Society of Medical Technologists

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NOTABLY SAFE. Toxicity of SOMA is extremely low. No effects on liver, endocrine system, blood pressure, blood picture or urine have been reported. Some patients may become sleepy, particularly on high dosage.

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SUPPLIED: Bottles of 50 white coated 350 mg. tablets.
Literature and samples on request.

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ment October 10 and 11 in the Medical Center Auditorium. On October 10, Dr. Hugh E. Stephenson, professor and chairman of the department of surgery, spoke to the Society on "Open Heart Surgery" and showed and discussed two films which had been taken at the Medical Center.

Over 250 persons attended the October 15 meeting of the Medical History Group, its first of the 1959-60 season. Dr. C. Thorpe Ray, professor and chairman of the department of medicine, guest speaker for the program, spoke on "Voodoo Medicine."

Trips and Talks

Dr. Gwilym S. Lodwick, Acting Dean of the School of Medicine, and professor and chairman of the department of radiology, attended the meetings of the Kansas City Southwest Clinical Society held in Kansas City, October 5 through 8, where he presided at one of the clinical sessions on October 7.

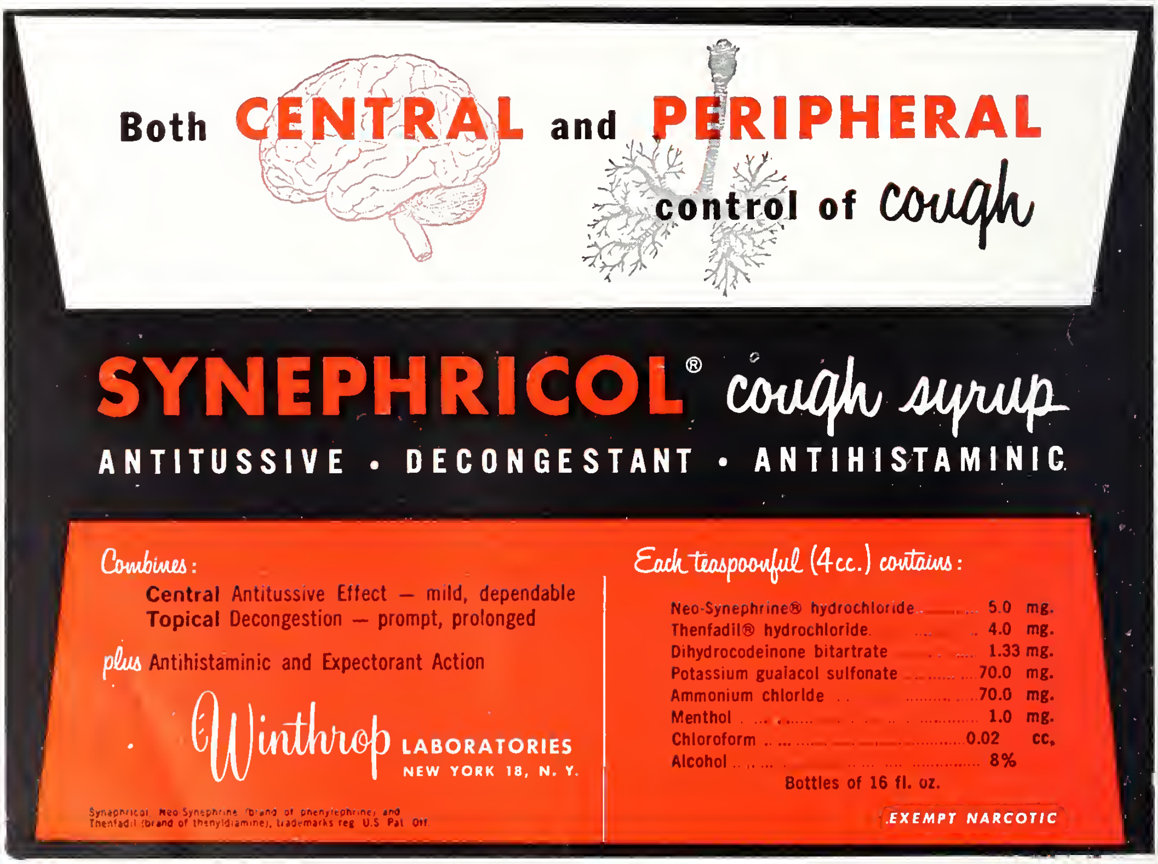
Dr. Lodwick also spoke to an Adult Education group at Hickman High School in Columbia on October 15 on "The Relationship Between the Hospital and Nurses During Their In-Service Training."

Dr. Herbert E. Brown, assistant professor of anatomy, attended a symposium on "From Cortisone to Dexamethasone: A Decade of Experience With Anti-Inflammatory Steroid Hormones" at the Menorah Medical Center in Kansas City on October 1. The symposium was sponsored by the Department of Education and Research of Menorah Medical Center. On October 10, Dr. Brown attended the meeting of the Missouri Division of the American Cancer Society held at the Missouri Hotel in Jefferson City.

Dr. T. D. Luckey, professor and chairman of the department of biochemistry, visited Washington, D. C., recently where he discussed "Interdisciplinary Research Equipment Program" with various departmental officials there.

Dr. C. Thorpe Ray, professor and chairman of the department of medicine, attended a series of meetings sponsored by the Kansas City Southwest Clinical Society on October 6 and 7 in Kansas City. Dr. Ray participated in a Trans-Atlantic Conference, a round table question and answer conference, and presented two lectures, "Effect of Electrolytes on the Electrocardiogram" and "Use of the Electrocardiogram in Clinical Diagnosis."

Several members of the Department of Microbiology attended the meeting of the Eastern Missouri Branch of the Society of American Bacteriologists held October 6 at Wohl Health Center in St. Louis. These included: Dr. Frank B. Engley, Jr., professor and chairman of the department, who presided at the meeting; Dr. Herbert S. Goldberg, associate professor; Dr. James T. Barrett, associate professor, who served as a member of the nominating committee; Dr. Michael Ivey, assistant professor; Donald P. Durand, assistant professor,



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Ferric Pyrophosphate (Soluble)	250 mg.
Iron (as Ferric Pyrophosphate)	30 mg.
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who presented a paper, "Studies on Newcastle Disease Virus—Host Cell Interaction Using Ultra-Violet Radiation"; Dr. M. Das; Wayne Stenback, assistant instructor; and Miss Mary Rigney, graduate student.

As Medical Director of the Disaster Plan Committee at the Medical Center, Dr. David Hall, assistant professor of obstetrics and gynecology, attended meetings of the Medical Education for National Defense (MEND) Program in Washington, D. C., and Cincinnati, Ohio, from October 12 through 16, 1959.

Dr. Joseph E. Flynn, professor and chairman of the department of pathology, attended the Leukemia Guild board of directors meeting, October 14, in St. Louis.

Dr. M. Pinson Neal, professor emeritus of pathology, attended a meeting of the Mississippi Valley Medical Society in St. Louis on September 29, 30 and October 1.

The Missouri Diabetes Association held its meeting September 19 and 20 at Arrowhead Lodge, Lake Ozark, Missouri. In attendance from the Medical Center were Dr. Robert L. Jackson, professor and chairman of the department of pediatrics; Dr. James Pickens, instructor. Dr. Jackson and Dr. Pickens reported on "Diabetes Mellitus in Identical Twins."

Dr. Jackson and Dr. Gerard Van Leeuwen, assistant instructor and second year resident in pediatrics, attended a meeting of the Missouri Heart Association also held at Arrowhead Lodge, Lake Ozark, Missouri, on September 20. During this meeting, Dr. Jackson and Dr. Van Leeuwen reported on a study completed from their Missouri Heart Association grant, "Survey of Rheumatic Fever and Congenital Heart Disease in Missouri." The results of this survey will be submitted for publication in MISSOURI MEDICINE.

On October 1, Dr. Jackson presented a paper to the Mississippi Valley Medical Society in St. Louis on "Newer Developments in the Management of Diabetic Children." This talk will be published in the *Journal of the Mississippi Valley Medical Society*. Dr. Jackson spoke to the Committee on Nutrition of the Illinois State Medical Society and the Illinois Nutrition Committee at a meeting held at Western Illinois University in Macomb, Illinois, on October 3. He presented the paper, "The Physician's Responsibility for the Nutrition of His Patients."

On August 25, Dr. R. L. Russell, associate professor of pharmacology, attended a conference at the Division of Health in Jefferson City on consideration of drugs involved by House Bill 370.

Dr. Arthur Merrick, associate professor of physiology, attended the fall meetings of the American Physiological Society held in Urbana, Illinois, September 7 through September 11.

Dr. Rodman Kabrick, assistant professor of

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clinical psychology, attended a meeting of the American Association of Psychiatric Clinics for Children held in Kansas City on October 2. Dr. Kabrick also attended a meeting of the Boone County Child Welfare Advisory Committee held October 9 at the Daniel Boone Hotel and sponsored by the State Department of Welfare.

Dr. Thelma Trombly, instructor of speech, was elected president of the recently organized Missouri Speech and Hearing Association at their meeting held October 10 at the University of Missouri. Dr. Trombly will also attend the meeting of the American Speech and Hearing Association to be held some time in November in Cleveland, Ohio.

Dr. Hugh E. Stephenson, professor and chairman of the department of surgery, attended the annual meeting of the American Association for Surgery of Trauma held in Bretton Woods, New Hampshire on September 24. He then attended the annual meeting of the American College of Surgeons which was held in Atlantic City, New Jersey, the week of September 28. On September 30, Dr. Stephenson spoke on "Cardiac Arrest" at the Yale University School of Medicine's 18th annual postgraduate program.

Dr. Samuel Black, professor of neurosurgery, participated in a panel discussion on "Anatomical and Physiological Aspects of Headache" on October 5, at the meeting of the Kansas City Southwest Clinical Society in Kansas City.

Dr. John Buesseler, associate professor of ophthalmology, served as an examiner for the American Board of Ophthalmology in St. Louis, October 8 through 10. He also attended the meetings of the American Academy of Ophthalmology and Otolaryngology held in Chicago, October 12 through 18.

Dr. Philip Hitchcock, associate professor of anesthesiology, presented a lecture on "Anesthetic Management of Cardiac Surgery" at the October meeting of the American Society of Anesthesiologists held at Bal Harbour, Florida.

Dr. Ian Thomson, associate professor of urology, attended the South Central Section of the American Urological Association meeting in Denver, Colorado, on September 25 through 27 and a meeting of the North Central Section of the AUA in Chicago, October 7-10. He also attended the meeting of the American College of Surgeons held in Atlantic City, New Jersey, September 28 through October 2.

Dr. Carl H. Almond, assistant professor of surgery, served as surgical consultant at Whiteman Air Force Base on October 1, and also attended the American Cancer Society's first annual medical and scientific session held at the Missouri Hotel in Jefferson City on October 10.

Dr. John Landor, assistant professor of surgery, has been selected by the University of Missouri faculty as its nomination to the John and Mary R. Markle Foundation as a candidate for a John and Mary R. Markle scholar.

Dr. Warren Sights, assistant professor of neu-

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rosurgery, attended a neurological meeting in Montreal, Canada, October 3 through 9.

A recent guest in the department of surgery was Dr. Joseph Peden of the department of surgery at Washington University School of Medicine. During his visit to the Medical Center on September 23, Dr. Peden conducted Grand Rounds and was guest lecturer.

Gifts and Grants

Dr. Joseph Flynn, professor and chairman of the department of pathology, and Dr. Vincent Perna, assistant professor, will be codirectors of a grant of $5,940 from the Leukemia Guild for research in "Hemolytic Anemia in Leukemia."

Dr. Robert L. Jackson, professor and chairman of the department of pediatrics, will be the director of a grant awarded by the Department of Health, Education and Welfare, Council on Arthritis and Metabolic Diseases, for his research in arthritis and metabolic diseases in the amount of $26,306.

Dr. Thomas Luckey, professor and chairman of the department of biochemistry, has been awarded a supplemental grant in the amount of $5,750 from the Department of Health, Education and Welfare for continuing his research in "Isolation of a Growth Factor for Invertebrates."

Dr. Henry McQuade, associate professor of radiobiology, has received a grant for $5,405 for research in "Radiation Effects of Thymidine-6-Tritium" from the Department of Health, Education and Welfare.

A supplemental grant award of $9,200 from the Department of Health, Education and Welfare, Council on Arthritis and Metabolic Diseases, has been made to Dr. John Franz, assistant professor of biochemistry, for his project, "Hormonal Control of Tryptophan Peroxidase-Oxidase."

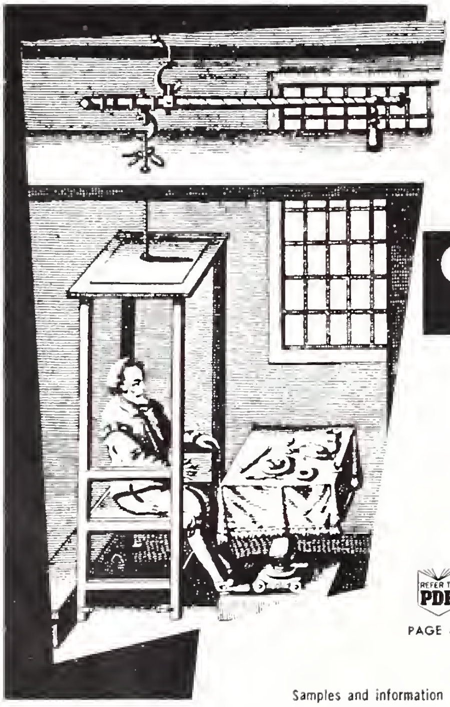
Appointments

Dr. Joe Robert Smith has been appointed clinical instructor in surgery (ophthalmology) effective July 1, 1959. Dr. Smith received his B.S., in 1951 from Central Missouri State College; his B.S. in Medicine in 1953 from Missouri, and his M.D. in 1955 from Washington University.

Dr. Carlo Rao assumed his duties as assistant instructor and second year resident in surgery October 1. Dr. Rao received his M.D. in 1945 from State College in Naples, Italy.

Dr. John E. Plumlee has been appointed assistant instructor and first year resident in surgery (anesthesiology), effective July 1, 1960. Dr. Plumlee received his B.S. in 1955 from Drury College, and his M.D. in 1959 from Missouri.

Dr. Howard B. Strauss has been appointed assistant instructor and first year resident in surgery (ophthalmology) beginning November 1, 1959. Dr. Strauss received his B.S. in 1943 and his M.D. in 1945, both from Tulane.



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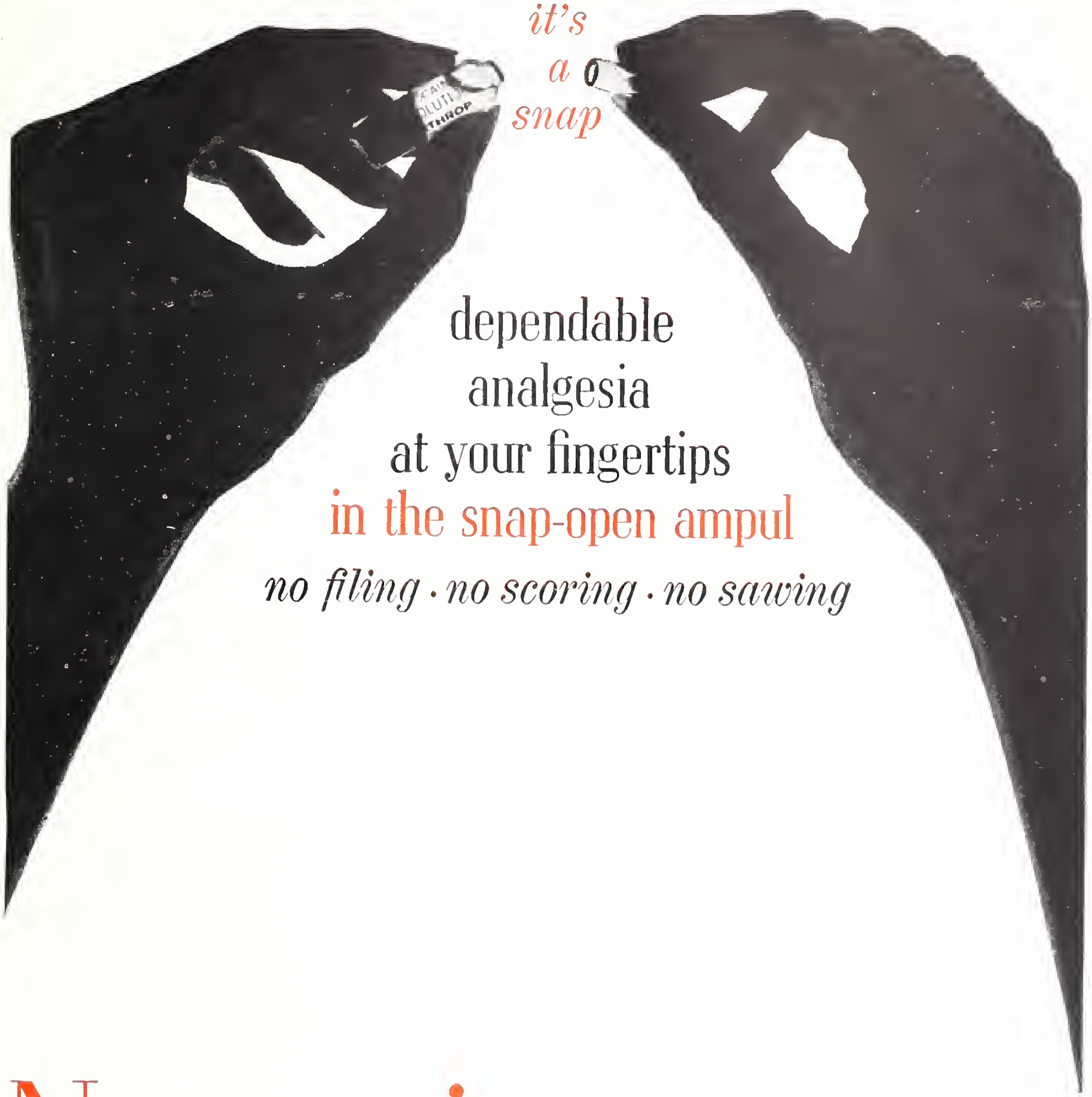

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SAINT LOUIS UNIVERSITY

Honored

Saint Louis University's highest award, the Fleur-de-Lis Medal, was presented to David P. Wohl, St. Louis philanthropist, for "his kindness, goodness and benevolence" in ceremonies held at the School of Medicine October 13.

The medal was conferred upon Mr. Wohl by the Very Rev. Paul C. Reinert, S.J., President of the University, before the School of Medicine faculty and student body at the close of a convocation, which was presided over by Rev. Jerome J. Marchetti, S.J., executive vice president of the University.

Mr. Wohl's generosity to Saint Louis University will make possible the construction of a $1,000,000 sixty-bed Health Institute at the School of Medicine for the treatment and study of mental illness. Mr. Wohl contributed $500,000 which was matched by grants under the Hill-Burton program for Missouri.

Construction of the hospital will get underway early next year. The Institute, which will be located on the northwest corner of Grand and Rutger Avenues, will be known as the David P. Wohl Health Institute.

Dean James W. Colbert, Jr., who was the main speaker at the convocation said that Mr. Wohl's gift to Saint Louis University has answered one of the truly urgent needs of the St. Louis community.

"The service and educational opportunities, which the Wohl Institute will provide, assure continuing support to the field of mental health," he said.

"This significant addition to the academic and scientific program at the School of Medicine establishes with our other facilities the core of another major American Medical Center," Dr. Colbert said.

"With this further emphasis to the medical reputation of St. Louis, this gift allows again for Saint Louis to set a precedent for the nation in medical care. The architectural design which has been planned about the needs of the patient is a pioneering development in the field of hospital architecture. There is already evidence of its impact upon national thinking in hospital design," he said.

In reading Mr. Wohl's Fleur-de-Lis citation before the convocation, Father Reinert began, "For the past twenty years, the Saint Louis community has become increasingly aware of the great humanitarianism of one of its foremost citizens. During that time, there have been many reminders of his desire to aid the well-being of his fellowman, principally by assisting the endless campaign against disease."

"This tradition dating back to 1940 when the Wohl Foundation was established—and the man

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responsible for its establishment—we are privileged to honor today. On behalf of the entire community, Saint Louis University desires to recognize the many splendid gifts made by David P. Wohl in his simply stated wish to aid others."

"Saint Louis University, which has been the recipient of two gifts from Mr. Wohl for the Medical Center, realizes that gratitude for such generosity is hard to measure. Indeed, it is difficult to say how many Saint Louisans for generations to come will benefit from the many contributions made by Mr. Wohl toward improving the health and medical facilities available to the community."

This portion of the citation referred to another award to the School of Medicine from the Wohl Foundation, which supported the construction of the Wohl Memorial Laboratory of Experimental Surgery, which was established in 1950. It was one of the first contributions made by Mr. Wohl to Saint Louis University and played a significant role in the development of open heart surgery in the Saint Louis area.

As a result of this early experimental research, more than 200 children and adults have undergone successful open-heart surgery at Cardinal Glennon Memorial Hospital for Children and Firmin Desloge Hospital.

Mr. Wohl's Fleur-de-Lis citation reviewed the many other gifts he has given to the community to enrich hospital facilities in the Saint Louis area.

The Fleur-de-Lis was the emblem carried aloft over the Christian armies, which followed the greatest of the Crusaders, the Sainted King, Louis IX, the Heavenly patron of the University, the Archdiocese and the City. Saint Louis University chose to establish this award as a tribute of esteem and affection to those truly outstanding persons who have in one way or another signalized themselves in service to the University. Mr. Wohl was the fourteenth recipient of the University's Fleur-de-Lis award.

Grant

The Office of the Surgeon General of the United States Army has awarded Dr. Edward A. Doisy, Jr., professor of biochemistry, a $20,800 grant for the continued support of irradiated food studies. It is the second year the U. S. Army has made contractual arrangements with Saint Louis University in irradiation research, bringing total allotments to $61,000.

Dr. Doisy's research investigations are being conducted in conjunction with Dr. John T. Matschiner, senior instructor in biochemistry, and involve the study into the fitness of irradiated food for human consumption.

Lectures

Dr. Ralph A. Reis, professor of obstetrics and gynecology, Northwestern University Medical School, will deliver a lecture series, which is being

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atoses; disseminated lupus erythematosus; nephrotic syndrome; lymphomas and leukemias.
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etate Parenteral (for intra-articular and intrasynovial injection). Vials of 5 cc. (25 mg./cc.).

References: 1. Feinberg, S.M., Feinberg, A.R., and Fisherman, E.W.: *J.A.M.A.* 167:58 (May 3) 1958. 2. Epstein, J.I. and Sherwood, H.: *Connecticut Med.* 22:822 (Dec.) 1958. 3. Friedlaender, S. and Friedlaender, A.S.: *Antibiotic Med. & Clin. Ther.* 5:315 (May) 1958. 4. Segal, M.S. and Duvenci, J.: *Bull. Tufts North East M. Center* 4:71 (April-June) 1958. 5. Segal, M.S.: Report to the A.M.A. Council on Drugs, *J.A.M.A.* 169:1063 (March 7) 1958. 6. Sherwood, H. and Cooke, R.A.: *J. Allergy* 28:97 (Mar.) 1958. 7. Duke, C.J. and Oviedo, R.: *Antibiotic Med. & Clin. Ther.* 5:710 (Dec.) 1958. 8. McGavack, T.H.: *Clin. Med.* (June) 1958. 9. Freyberg, R.H.; Berntsen, C.A., and Hellman, L.: *Arthritis and Rheumatism* 1:215 (June) 1958. 10. Hartung, E.F.: *J.A.M.A.* 167:973 (June 21) 1958. 11. Hartung, E.F.: *J. Florida Acad. Gen. Pract.* 8:18, 1958. 12. Zuckner, J.; Ramsey, R.H.; Caciolo, C., and Gantner, G.E.: *Ann. Rheum. Dis.* 17:398 (Dec.) 1958. 13. Appel, B.; Tye, M.J., and Leibsohn, E.: *Antibiotic Med. & Clin. Ther.* 5:716 (Dec.) 1958. 14. Kalz, F.: *Canad. M.A.J.* 79:400 (Sept.) 1958. 15. Mullins, J.F., and Wilson, C.J.: *Texas State J. Med.* 54:648 (Sept.) 1958. 16. Shelley, W.B.; Harun, J.S., and Pillsbury, D.M.: *J.A.M.A.* 167:959 (June 21) 1958. 17. DuBois, E.F.: *J.A.M.A.* 167:1590 (July 26) 1958. 18. McGavack, T.H.; Kao, K.T.; Leake, D.A.; Bauer, H.G., and Berger, H.E.: *Am. J. Med. Sc.* 236:720 (Dec.) 1958. 19. Council on Drugs: *J.A.M.A.* 169:257 (Jan. 17) 1959. 20. Rein, C.R.; Fleischmajer, R., and Rosenthal, A.R.: *J.A.M.A.* 165:1821 (Dec. 7) 1957.

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sponsored by the department of gynecology and obstetrics of the Saint Louis University School of Medicine Thursday, December 10. The morning program will feature two lectures by Dr. Reis entitled "Carcinoma in Situ and Cervical Carcinoma With Minimal Invasion" and "Re-evaluation of Endocrine Therapy." The morning sessions will be held in Miller Hall, Firmin Desloge Hospital, 1325 South Grand Blvd., from 8:00 a.m. to 11:30 a.m. The afternoon session will be devoted to "A Clinical Pathological Conference on Endometriosis." It will begin at noon in Lecture Room A, Saint Louis University School of Medicine, 1402 S. Grand Blvd. Physicians interested in attending the program may make reservations with Miss Helen Gerst by callling Prospect 1-7600, Station 211.

Dr. Ralph F. Bowers, chief of the surgical service at Kennedy Veterans Administration Medical Teaching Group Hospital, Memphis, Tenn., delivered the annual Albert Kuntz lecture sponsored by the Phi Chi medical fraternity October 30. Dr. Bowers' lecture entitled "Gastro-Intestinal Bleeding and Surgery" was delivered at the Coronado Hotel. Dr. Bowers received his doctor of medicine degree from Johns Hopkins University in 1925 and took his residency training at Cincinnati General Hospital and New York Hospital.

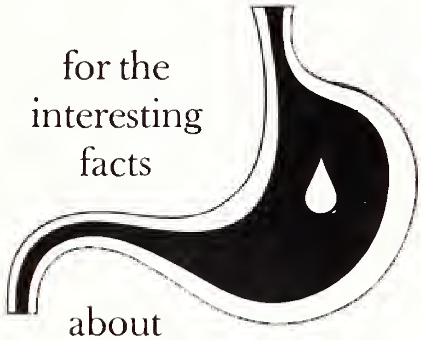
Dr. Kuntz, an international authority on the autonomic nervous system, died in 1957. He was director of the department of anatomy and had been a member of the University's medical faculty for 44 years.

Dr. John P. Wyatt, professor of pathology and associate director of the department, participated in the program of the Mississippi Valley Trudeau Society held at the St. Nicholas Hotel in Springfield, October 9. He delivered a paper on "Coal-Miners Pneumoconiosis." Dr. Herbert C. Sweet, associate professor of clinical medicine, was the co-author. Dr. Sweet also presented a paper on "Acute and Chronic Cor Pulmonale" before a combined clinic held at the School of Medicine October 30. The program was sponsored by the Department of Internal Medicine.

Dr. Vallee L. Willman, assistant professor of surgery, and Dr. William F. Kistner, senior instructor in internal medicine, participated in the meeting of the American College of Surgeons held in Atlantic City September 27 to October 2.

Dr. Kistner presented a paper on "Fundamental Improvements in Design of the Tracheostomy Tube." Dr. Willman presented a paper on "Measures to Limit the Myocardial Depression Associated With Elective Cardiac Arrest."

Dr. Francis X. Paletta, assistant professor of clinical surgery, presented a paper entitled "Relationship of Post-Ischemic Histopathologic Changes to Muscle and Subcutaneous Temperature Patterns in Canine Extremity."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Missouri Medicine in Review

Leo H. Pollock, M.D.

FORTY YEARS AGO

The Pennsylvania State Medical Association has increased the state assessment of members to $5 per annum while Indiana and Texas have increased their state assessments to $4.

Edina citizens are campaigning for funds to erect a hospital in that city. The Chamber of Commerce and the physicians have begun soliciting contributions from the people in the county as well as in Edina.

Leo H. Pollock, M.D.

General Gorgas reports that yellow fever has been wholly eradicated from South America and that its disappearance in that country wipes the disease off the face of the earth. Dr. Gorgas has been elected an honorary member of the National Academy of medicine of Peru.

Dr. Philip Skrainka of St. Louis, editor of *Medicine and Surgery,* has opened a department for the revision and correction of manuscripts of medical papers intended for publication or presentation at medical societies. This department will be under the personal supervision of Dr. Skrainka.

Dr. G. Canby Robinson of St. Louis was elected chairman of the Section on Medical Education and Dr. John R. Caulk of St. Louis was elected vice chairman of the Section on Surgery at the Nashville meeting of the Southern Medical Association, November 11. About 1,200 attended the meeting.

Dr. George W. Crile of the surgical staff of the school of medicine of Western Reserve University has given $100,000 to endow a chair of surgery in the school. Dr. Crile is professor of surgery in the school and was head of the Lakeside Hospital Unit of Cleveland which was one of the first American units in France.

Through a special committee recently appointed by the board of directors of Washington University a campaign has been started for increasing the endowment fund so that the salaries of the teachers may be raised. The committee expects to raise a fund of $2,000,000 for the purpose, the contributions to be invited from the alumni and the general public.

ANNUAL CLINICAL CONFERENCE

CHICAGO MEDICAL SOCIETY

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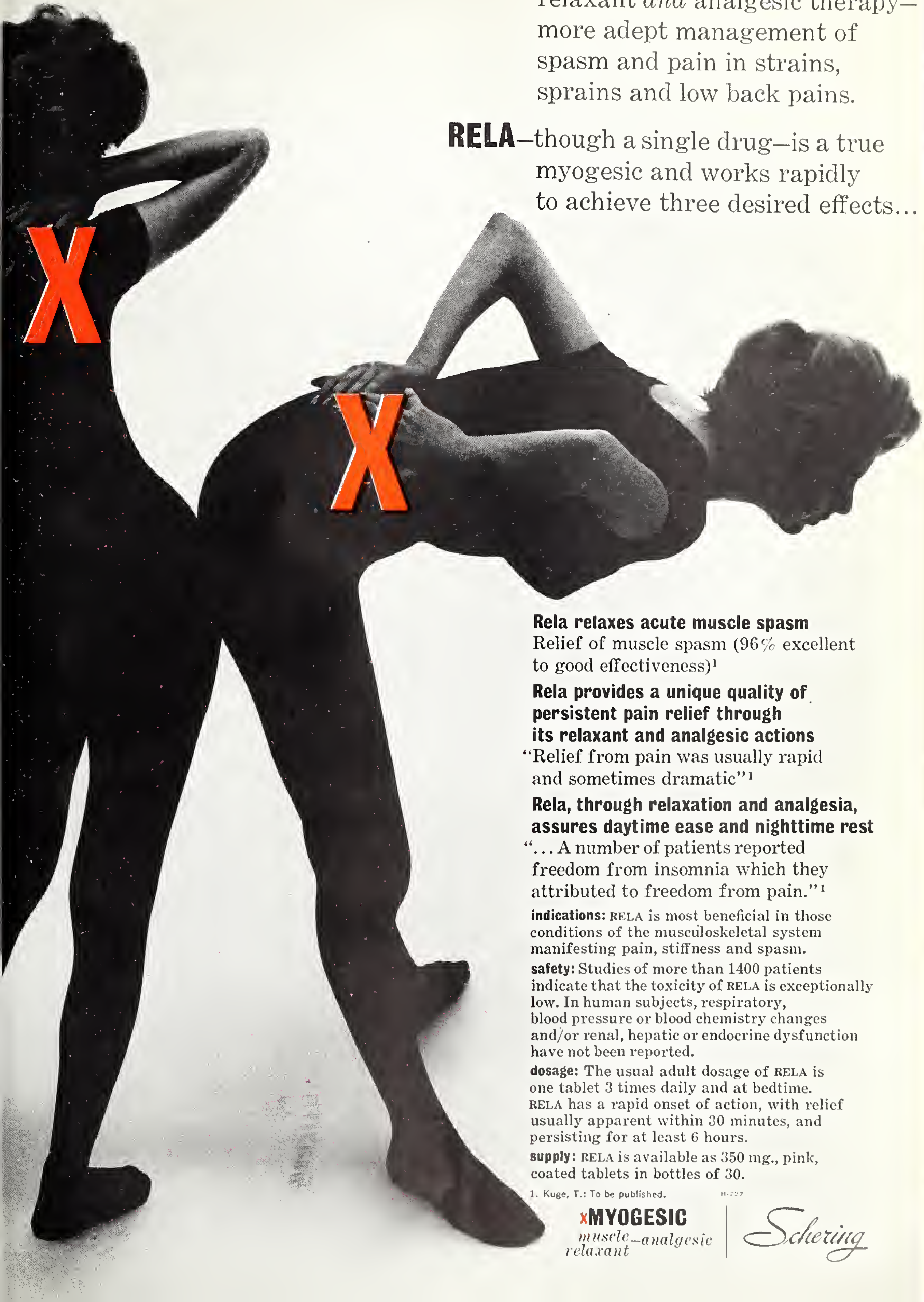

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1. Kuge, T.: To be published.

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TWENTY-FIVE YEARS AGO

Many men when they die leave deeds done, precedents established or work begun which those following after can carry on. Probably the greatest heritage a man may leave is a work that may be continued. Such a man was the late Dr. Roger William Gay, Ironton, and his heritage was the Arcadia Valley Hospital which other physicians and the Sisters of St. Mary have carried on.

Three reappointments of members of the Missouri State Board of Health were announced by Governor Park on November 14. The terms will expire July 1, 1938. Dr. W. L. Brandon, Poplar Bluff, who was named last April to fill the unexpired term of the late Dr. W. A. Clark, Jefferson City, was reappointed. The other two members who were reappointed are Dr. T. H. Bourke, Kansas City, and Dr. E. Sanborn Smith, Kirksville.

The following officers have been selected for the ensuing year by the Kansas City Southwest Clinical Society: President, Dr. C. C. Nesselrode; vice president, Dr. M. B. Simpson; secretary, Dr. Ralph R. Coffey; treasurer, Dr. Ira H. Lockwood, associate director of clinics, Dr. Max Goldman, and editor, Dr. Rex L. Diveley. The executive committee is composed of Drs. J. V. Bell, Rex L. Diveley, A. Morris Ginsberg, A. C. Griffith, M. A. Hanna, M. J. Owens, E. H. Skinner and Raymond Teall.

The fifty-second annual meeting of the Wabash Railway Surgical Society convened in St. Louis November 5 and 6 with over eighty present. Dr. F. J. Harrison, Mexico, presided at the session. Dr. Dudley A. Robnett, Columbia, was elected vice president.

The Frisco System Medical Association held its thirty-third annual meeting in St. Louis October 8 and 9 with over a hundred in attendance. Dr. Dean Lewis, Baltimore, Maryland, was the guest speaker. Dr. Elsworth Smith, St. Louis, presided at the St. Louis session and Dr. R. M. James, Joplin, was elected president for the ensuing year. Dr. Robert Vinyard, Springfield, is secretary.

The Cole County Medical Society held its regular annual fall Clinic at St. Mary's Hospital, Jefferson City, October 30. This session supplements the regular weekly meetings. The clinic was an excellent meeting and was well attended by physicians from the counties of Central Missouri.

TEN YEARS AGO

Florence E. MacInnis, M.D., Kansas City, was elected vice president of the Mississippi Valley Trudeau Society at a meeting September 22 to 24.

Frederick A. Jostes, M.D., St. Louis, was the recipient of a testimonial award "in recognition of devoted and distinguished service to the Crippled Children of Missouri" from the Missouri Society for Crippled Children and Adults on October 21.

Missouri physicians who became Fellows of the

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American College of Surgeons at the 1949 convocation are Drs. William Barry, Ernest K. Robinson, Richard A. Twyman and Franklin H. Wakefield, Kansas City; Russell J. Crider, St. Charles; Morris Davidson, Emmett B. Drescher, Carl J. Gissy, William L. Smiley, Gene B. Starkloff and Arthur N. Vaughn, St. Louis; Ben G. Mannis, Jefferson Barracks; John R. McDaniel, Wilbur P. McDonald and Henry C. Willumsen, St. Joseph; Dayton R. Seabaugh, Cape Girardeau; Horace E. Thomas, Columbia.

The Second Annual Clay County Medical Society Clinical Conference was held at the Elms Hotel, Excelsior Springs, on November 13. The conference opened at noon with a luncheon and round table discussion on "Anesthesiology" followed by a talk by Milton C. Peterson, M.D., Kansas City, on "Uses of Intravenous Procaine," and one by Louis Porter, M.D., Kansas City, on "Short Anesthetics for Office Use." Some 100 physicians were in attendance at the conference.

Thirty-six physicians attended a joint dinner meeting of the Caldwell-Livingston, Clinton, Grundy-Daviess, Carroll, Harrison, Linn, Mercer and Ray County Medical Societies at the Strand Hotel, Chillicothe, Thursday, October 27. W. A. Bloom, M.D., Fayette, President-elect, Missouri State Medical Association, discussed briefly the plans for the 1950 Centennial Meeting of the Association and praised the group for the splendid meetings being held in Chillicothe from time to time.

Missouri Academy of General Practice

(Continued from page 1348)

the presentations by the guest speakers. P. C. Hall offered a number of helpful ideas on recruiting and enrollment. Walter Gunn added much to the discussion on "Hospital and the General Practitioner."

Chapter communications including chapter publications were ably commented upon by Barney Finkel. William Mullarky told of the success of the recent "Dollars and Sense" meetings sponsored by the St. Louis Academy for interns, residents and medical students in the St. Louis area where problems of beginning a practice were discussed.

The session on current legislative problems was one of special interest. James W. Foristel and Warren Whyte, representing the American Medical Association's Washington and Chicago offices, discussed the A.M.A. Current Legislative Program. The high light of this session, however, was the talk given by Tom Curtis of Webster Groves, Mo., Congressman from Missouri. Mr. Curtis pointed out that physicians have the same privilege and duty as other citizens to take political action concerning matters affecting them and their profession. He indicated that all groups affected by legislation needed to be encouraged to state their viewpoints so that the public interest may be served. It is our understanding that this speech by Mr. Curtis will be reprinted in *GP*.

The banquet held on Saturday night, September 26, was highlighted by the "Greene County Boys" giving another fine offering of their Medical Hit Parade. Two long playing records of their songs have been recorded. They are entitled "Placenta Preview" and "Borborygmi."

These are available at $3.25 each through the Green County Medical Society, Medical Arts Building, Springfield, Mo. They are most entertaining. Why not order these records and hear for yourself?

The income from the sale of these records goes into a fund which is to be used for the extension of medical knowledge and the advancement of medical science. The granting of scholarships to needy and worthy medical students will be made from this fund.

A $1,000 donation from the fund has recently been made to the Students American Medical Association to aid in the promotion of the work of this fine organization.

The Woman's Auxiliary

(Continued from page 1350)

iary meetings, and to participate in its activities.

"What's New From National" has been brought to officers and members of Districts 1, 3 and 4, at District meetings held in St. Joseph and St. Louis on October 20 and 22, under the leadership of District Directors, Mrs. Joseph L. Fisher, Mrs. Oliver Tjoflat, and Mrs. William H. Grundmann. Seven county auxiliaries were represented at these meetings.

Among the delegates from the Missouri Auxiliary to the Conference on Aging, held in Kansas City November 16-17 were Mrs. Jordan Kelling, Waverly, state president-elect; Mrs. Carl Ferris, state secretary; Mrs. Frederick Wade, president, Jackson County Auxiliary; and the state president.

Remember, our slogan for this year is "Individual Responsibility for Better Community Health." Please call on us to help with your projects, and in this way we can achieve our goals.

BOOK RECEIVED

ATRIAL ARRHYTHMIAS, DIGITALIS AND POTASSIUM, by Bernard Lown, M.D., Research Associate in Medicine, Department of Nutrition, Harvard School of Public Health; Junior Associate in Medicine, Peter Bent Brigham Hospital, Boston, Massachusetts; and Harold D. Levine, M.D., Senior Associate in Medicine, Peter Bent Brigham Hospital, Boston, Massachusetts; Assistant Clinical Professor of Medicine, Harvard Medical School. Landsberger Medical Books, Inc., New York. 1958. Price $6.90.

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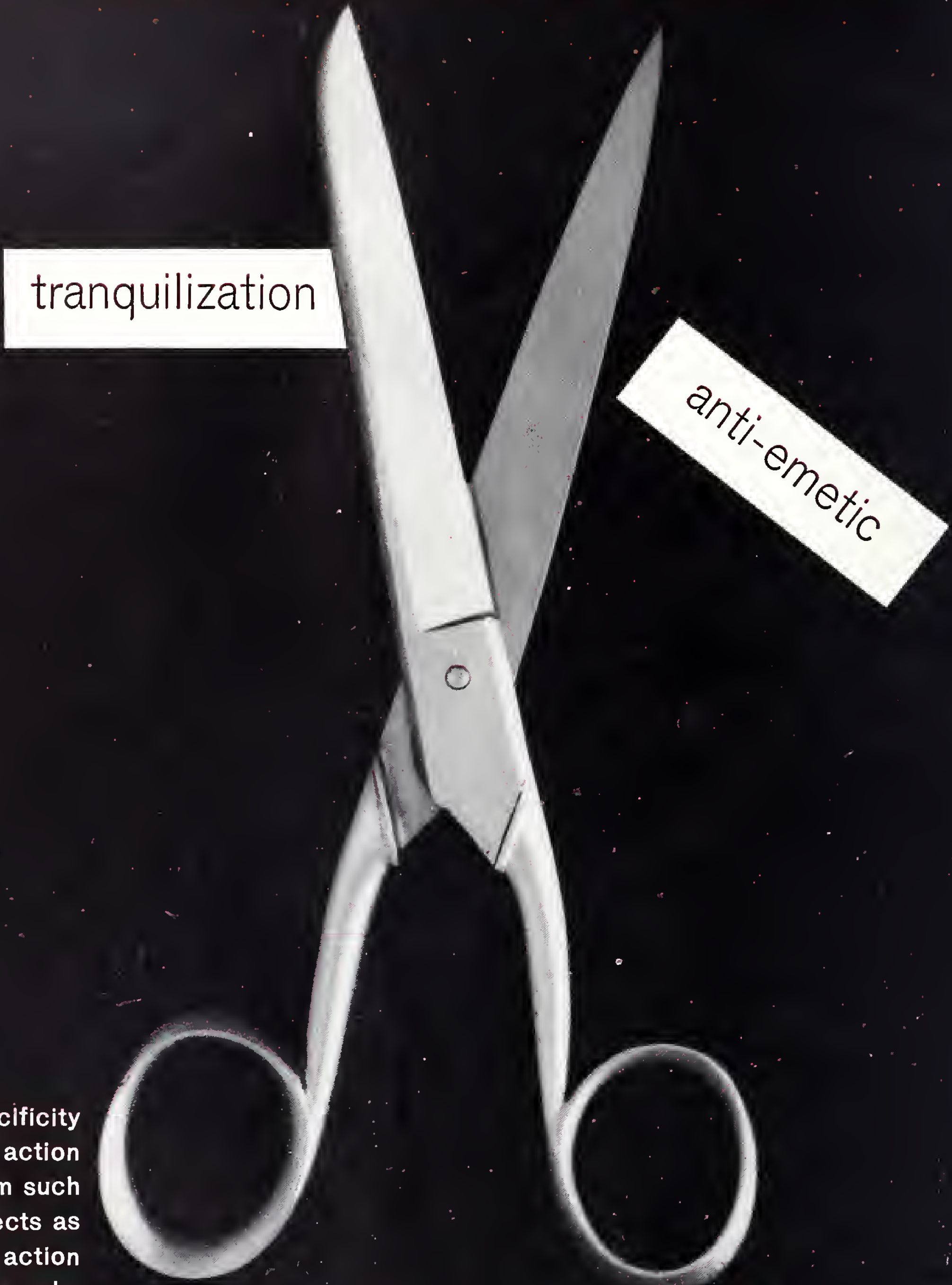

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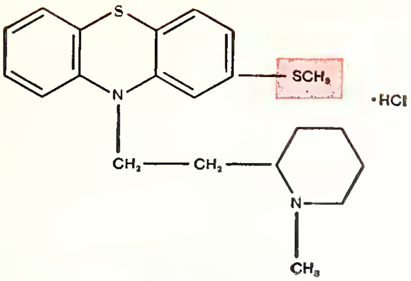
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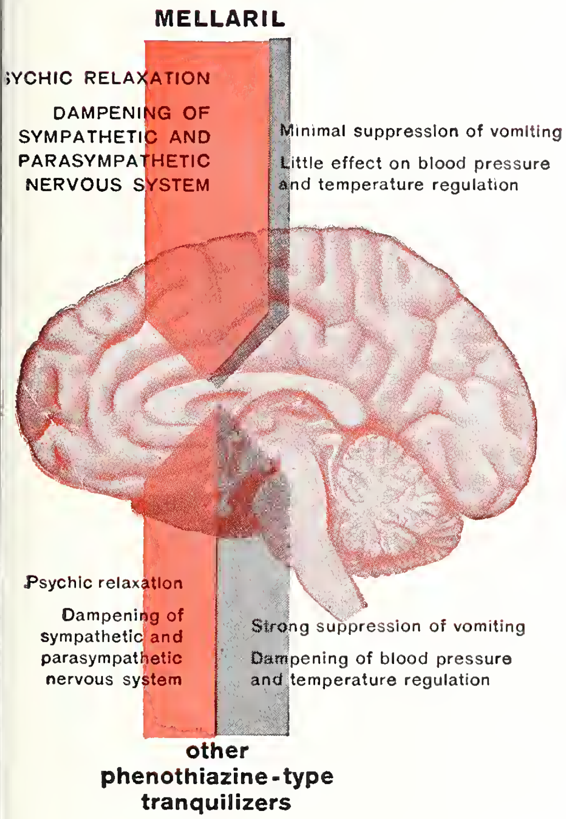
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Little effect on blood pressure and temperature regulation
Psychic relaxation
Dampening of sympathetic and parasympathetic nervous system
Strong suppression of vomiting
Dampening of blood pressure and temperature regulation
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1 A specificity of action on certain brain sites in contrast to the more generalized or "diffuse" action of other phenothiazines. This is evidenced by a lack of appreciable anti-emetic effect.

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2 Less "spill-over" action to other brain areas — hence, absence of undue sedation, drowsiness or autonomic nervous system disturbances.

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Ambulatory	100 mg. t.i.d.	200-400 mg.
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stfeld, A. M.: Scientific Exhibit, American Academy f General Practice, San Francisco, April 6-9, 1959

SANDOZ

Pharmaceuticals Today

Medicine is not alone in present-day criticism of high costs—drugs share this criticism also. With this in view, the *Memphis Medical Journal* asked the Health News Institute to prepare an article on this subject and the following article appeared in the July issue of the *Memphis Medical Journal* and is reprinted with permission.

CONQUEST AT BARGAIN PRICES

What percentage of your patients complain to you that the price of medicine is too high? If it's about four out of every ten you're right at the national average.

But, before you decide to agree with these patients, it might be a good idea to take a good long look at the prescription prices to determine why they cost what they do, and whether they really are too expensive.

According to one publication, the average prescription in 1958 cost $3.08. But, of course, this doesn't really tell the story of prescription prices. This same prescription . . . or one costing $5 or $10 . . . often helps physicians cure an illness that twenty or thirty years ago would have cost $500 or $1,000. Maybe it was responsible for the patient's survival.

The story of pneumonia is a good case in point. Thirty years ago, according to a survey conducted in Philadelphia, a case of lobar pneumonia meant five weeks in the hospital, out-of-pocket costs of at least $400, plus lost earnings during hospitalization and convalescence. Total costs: About $1.000. And one out of every three patients died. Today the average case of lobar pneumonia lasts less than two weeks, does not usually require hospitalization, and only one out of 26 victims dies. Total cost: About $15 for penicillin or $30 for one of the broad spectrum antibiotics, plus the physician's fee.

Mastoiditis is another good example. In 1940, Children's Hospital in Boston reported 305 cases of mastoid abscess. For most of these stricken youngsters, little more than palliative treatment could be administered to ease the agony while they were waiting for a difficult and painful operation which cost up to $1,000, and often meant partial loss of hearing. Today, many younger doctors have never seen a mastoid abscess. The "expensive" antibiotics permit physicians to control the infection for a cost of $15 to $20, and eliminate the need for surgery.

Not only has the cost of illness dropped since the introduction of the modern drugs, but our people spend little more of their disposable income today for medicines than they did twenty or even thirty years ago. In 1929, Americans spent an average of .73 per cent of after-tax income on drugs and sundries. In 1957, that figure had increased to only one per cent despite an increase in the average price of prescriptions from 85 cents in 1929 to $2.90 in 1957.

Nor has the cost of prescriptions during the postwar inflationary spiral taken as heavy a bite from the American paycheck as many other necessities. Bureau of Labor statistics indicate that medicine costs have risen by only 26 per cent since 1946, compared with 41 per cent for food, 45 per cent for rent and 39 per cent for the cost of living index in general.

The clearest indication of the relative decrease in prescription prices can be determined from an examination of the so-called "real price" of prescriptions. That is, the amount of time that the average American has to work to pay for his average-priced prescription.

In 1929, as we have noted, the average price for a prescription was 85 cents. To pay for this, it took one hour and thirty-one minutes of working time at prevailing wages. In 1958, despite the fact that the average prescription cost $3.08, it took only one hour and 26 minutes of working time to pay for it.

One of the main reasons for the increases in prescription costs is the steadily rising percentage of sales devoted to research. Out of every dollar received by pharmaceutical manufacturers from sales of medicine in 1958, more than nine cents was plowed back into research and development of new drugs. In 1958, alone, the pharmaceutical industry invested more than $170,000,000 in research. This represents an increase of 50 per cent over the $110,000,000 spent on research only two years earlier, in 1956.

One drug corporation executive estimates that "about three years of intensive investigation usually in required before a drug can be judged effective and released for public usage. Furthermore, only one new compound in 500 to 1,000 ever reaches the drug store . . . odds which no professional gambler would ever take."

More than 8,000 different compounds were screened by one company in the search for isoniazid. Another company studied 34,000 potential antibiotics and 8,000 chemicals in the search for better healing agents. Of the 42,000 products studies, just six were considered worthy of clinical testing.

And, not all of the products which prove clinically valuable turn out to be commercial successes. The story of the multi-million dollar search for pneumonia vaccine which panned out just as the sulfa drugs came along is one example. Another is the story of the synthesis of cortisone from ox bile, which cost millions of dollars to accom-

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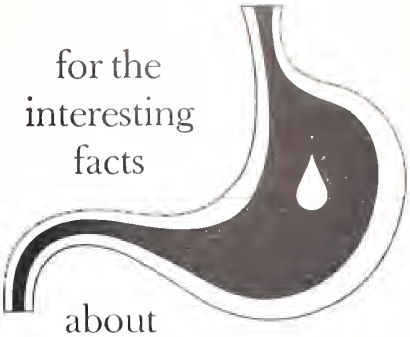

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plish and which was on the market for only six months before a cheaper process of synthesizing the steroid was discovered by a competitor.

Both the successes and failures of research have contributed to the increased price of new medicines. But, both the successes and failures of research have also contributed to the better health and well being of Americans.

In balance, the cost of medicines must be weighed against our increasing life expectancy; the virtual disappearance of childhood diseases; the plummeting death rate from influenza, pneumonia and tuberculosis; and the future hope for relief from today's great killers, cancer and heart disease.

TUBERCULOSIS ABSTRACT

The "Open-Negative" Problem

Clear cut definitions of "open-negative," "relapse" and "bacteriologic remission" are recommended by the Committee on Therapy of the American Trudeau Society as a means of dispelling the present confusion surrounding this problem.

The "open-negative" problem is largely a product of the chemotherapy era. Formerly the persistence of open cavity on the roentgenograms of a tuberculous patient was almost invariably associated with the ability to recover tubercle bacilli from his secretions. Today, however, the majority of patients receiving a first course of effective chemotherapy for cavitary tuberculosis pass through a phase of bacteriologic remission while one or more cavities are still open. In some, this is followed by cavity filling or closure leading to an inactive classification. In others, the bacteriologic remission and persistent open lesion coexist for months or even years. This group of cases constitutes the "open-negative" problem.

The problem is that, after eight years of experience, agreement on the treatment and prognosis of these patients is lacking. Much of the conflict appears to be the result of the different ways in which various reporters use the terms "open-negative" and "relapse."

For the purposes of this report an "open" lesion is a hole or space in an area of the lung previously involved by tuberculosis, containing air and usually surrounded by a wall of sufficient density to be recognizable as such morphologically or roentgenographically. Not included are: (1) areas of increased radiolucency of segmental or lobar extent without a definite wall; and (2) former cavities, from which all air is absent; and (3) bullae, cysts, and areas of cystic or saccular bronchial dilatation when these can be differentiated with reasonable certainty from residual tuberculous cavities—a distinction not always possible.

The duration of bacteriologic remission required for inclusion in the "open-negative" category must be arbitrary. It is recommended that tubercle bacilli shall have been absent from the sputum and gastric contents examined at monthly intervals for at least six months. It is also recommended that the term "open-negative" be supplemented by indicating the duration of bacteriologic remission: thus "open-negative 6 months" or "open-negative 18 months."

INCIDENCE AND DIAGNOSIS

It has been estimated that approximately 90 per cent of patients who receive a first course of effective chemotherapy for cavitary pulmonary tuberculosis will achieve bacteriologic remission (reversal of infectiousness, sputum conversion) during the first eight months of treatment. More than half of such patients, however, will still have roentgenographic evidence of cavity if examined carefully.

The diagnosis of an open lesion on chest roentgenograms or planigrams preoperatively is usually followed by its discovery in the resected specimen. In general, an open lesion of some kind will be found in the resected specimen in 75 to 85 per cent of cases when one is reasonably suspected after careful examination of serial roentgenograms. The more equivocal the roentgenogram, the poorer this correlation becomes.

Although much has been made of the advanced state of healing in some resected "open-negative" lesions, this is a relative thing which is usually compared with the morphologic appearance of cavities resected without drug coverage or obtained at autopsy. Even today with effective chemotherapy, the majority of resected "open-negative" lesions show residual caseous foci and granulation tissue irregularly distributed in and along the cleanly sloughed, fibrotic cavity wall.

It has been shown that the longer the period of bacteriologic remission prior to resection in surgically treated cases, the more advanced the healing process appears and the more difficult it is to recover viable bacilli. A similar correlation between the duration of bacteriologic remission and the morphology and tissue bacteriology in unresected "open-negative" cases is often assumed, but specific proof is missing.

RELAPSE

If one wishes to measure the prognostic significance of the "open-negative" state by the incidence of relapse, one must arbitrarily define relapse. Simultaneous roentgenographic worsening and posi-

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Issued by the National Tuberculosis Association.

A Statement of the Committee on Therapy, American Trudeau Society, *The American Review of Respiratory Diseases*, Vol. 80, No. 1, July, 1959.

Thomas B. Barnett, Edward Dunner, H. Corwin Hinshaw, Gardner Middlebrook, Donald L. Paulson, James W. Raleigh. William W. Stead, James A. Wier, *chairman*.

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tive bacteriologic findings are universally accepted as evidence of relapse. It is proposed that recovery of tubercle bacilli by sputum culture or smear or gastric culture in a patient classified as "open-negative" be considered a relapse. While it might seem desirable to require more than a single positive bacteriologic finding for relapse, the tendency to introduce new drugs or other measures after even a single positive culture, especially when unsuspected drug resistance is noted, is very common and a second positive bacteriologic finding might thereby be prevented or masked, thus lowering the relapse incidence artificially.

Unfavorable roentgenographic changes with smears and cultures repeatedly negative for tubercle bacilli may be due to nontuberculous pulmonary diseases. Such changes, therefore, should rarely, if at all, be counted in tabulating tuberculosis relapse incidence in the "open-negative" group. The physicians may elect quite properly to treat such a patient as a case of tuberculous relapse in the absence of bacteriologic confirmation, but for statistical purposes such cases should be classified separately. The same applies to patients who show signs of clinical worsening such as fever, weight loss, increased cough, expectoration, or even hemoptysis without roentgenographic change or bacteriologic confirmation of tuberculous etiology. The role of indefinite prolongation of drug therapy in preventing relapse needs investigation. The earlier a relapse occurs, the more likely it is to occur while drugs are still being given; the later the relapse occurs, the more likely it is to follow cessation of chemotherapy.

IN SUMMARY

The problem of persistent open cavity with bacteriologic remission of greater or less duration is a phenomenon peculiar to the era of effective chemotherapy for tuberculosis. The roentgenographic findings fairly represent the morphologic findings in the majority of patients whose lesions are resected and may also reflect the findings in unresected lesions.

The definition of "open-negative" based on the presence of a cavity and inability to recover tubercle bacilli from secretions is arbitrary, but a bacteriologic remission of six months or longer is recommended for inclusion in this category. Relapse should be defined as bacteriologic escape or combined roentgenographic-bacteriologic worsening, but not as clinical or roentgenographic worsening without bacteriologic proof of its tuberculous etiology.

The relationship between relapse, duration of bacteriologic remission, and the duration of effective drug therapy is in need of further study. Only then can the relative risk of relapse and the risk of resection in patients exemplifying the "open-negative" problem be fairly weighed.

BOOK REVIEW

BCG Vaccination Against Tuberculosis, by Sol Roy Rosenthal, M.D., Ph.D., Director, Institution for Tuberculosis Research of University of Illinois; Medical Director, Research Foundation; Director, Tuberculosis Prevention Research of the Chicago Municipal Tuberculosis Sanitarium; Associate Professor, Preventive Medicine, University of Illinois College of Medicine. With Sections by Dr. Camille Guerin, Honorary Chief of Service, Institut Pasteur, Paris; Dr. Bernard Weill-Halle, Honorary Director, School of Puericulture; Member Faculty of Medicine, University of Paris; and Dr. Arvid Wallgren, Professor of Pediatrics and Head of the Pediatric Clinic, Royal Caroline Institute of Medicine, Norrtull's Hospital, Stockholm. Little, Brown and Company, Boston, 1957. Price $7.50.

Two thirds of this book was written at the Pasteur Institute in Paris where Dr. Rosenthal had access to the world literature on BCG. Its author and subject index, and well documented references, make it helpful to those who are interested in tuberculosis.

The history of BCG written here by Dr. Camille Guerin is fascinating and brings a bit of human interest into this treatise.

Through the years, there has been much controversy on the use of BCG vaccine. The author states in his foreword, that this volume on BCG is directed toward the medical profession and allied groups in the United States, with the hope of clarifying the BCG problem. He also states that this vaccination against tuberculosis has been accepted with few exceptions, as standard practice in virtually every country in the world. It is estimated that over 100 million people have been vaccinated with BCG.

In the United States, the use of BCG has been on a small scale and mass vaccination is not advocated. The American Trudeau Society and the United States Public Health Service, along with other groups, recommend vaccination in "children and certain adults considered to have inferior resistance, and living in communities in which the tuberculosis mortality rate is unusually high."

This text discusses immunity in tuberculosis, vaccinations against tuberculosis other than BCG, and follows with the history of BCG. The cultural characteristics, morphology and staining properties, the dissociation and variation of virulence or attenuation of BCG are outlined. "There have been three periods in the history of dissociation and variation in virulence of BCG since 1921, when the strain was considered stable and safe for human inoculation. During the first period (1921-1931), a virulent variant was described; in the second (1932-1935) reports on virulent variants were negligible; and in the third (since 1946),

(Continued on page 1432)

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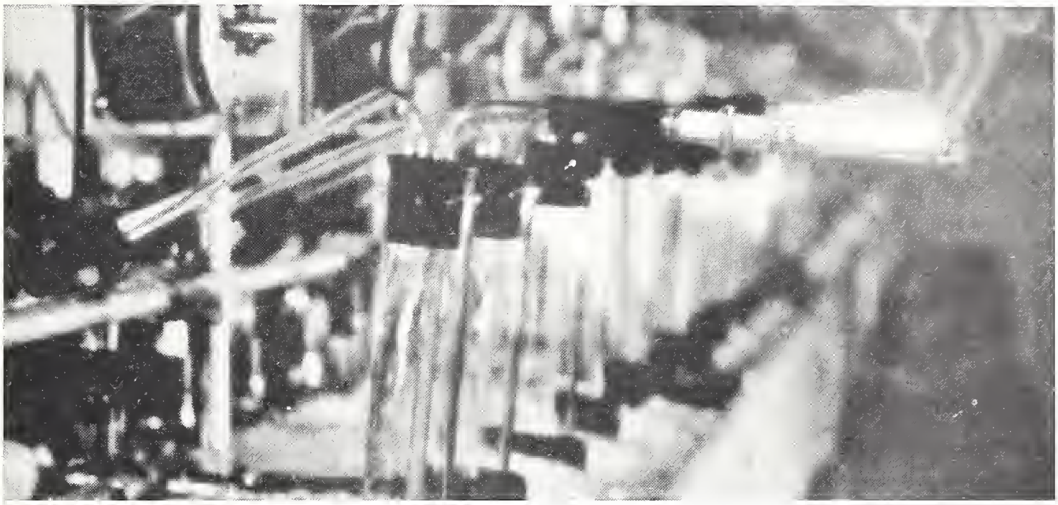

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the possibility of a further attenuation has been suggested."

Methods of preparation and preservation of the vaccine are discussed and comparative studies of vaccines from various countries are given. The use of dried vaccine, its favorable comparison with fresh vaccine, and methods of vaccination are described along with reports on resistant studies in animals and man.

There are discussions on the results of tuberculin testing, and the use of varied forms of tuberculin after vaccinations and, too, there is a statement that for the present, BCG vaccination is not recommended without previous tuberculin testing, in order to minimize accelerated reactions and the possibility of vaccinating in the presence of active disease.

In the final chapter, "Tuberculosis Control and BCG Vaccination—Suggestions for a Comprehensive Control Program," there is a rough estimate that 30 to 40 per cent of the entire population, in the United States, are infected with tubercle bacilli. About 45 per cent of active known cases of tuberculosis are unhospitalized. Of these, 87 per cent have far advanced disease. The status of sputum is unknown in one half; one half are discharged from hospitals against medical advice; and 40 per cent have no drugs or bed rest recommended. The rapid drop in death rate, due to modern chemotherapy and surgery, has not been paralleled so far as morbidity is concerned. One hundred thousand new cases of tuberculosis have been reported every year, for 14 years or more.

The concluding chapter includes a quotation from Dr. James J. Warring, written in March 1956: "I think negative reactors to the tuberculin test, among highly exposed persons, should have BCG vaccination. This would include nurses, medical students and children in tuberculous families. If this action is unapproved, one must surely seriously consider chemotherapy of recent converters with or without x-ray pulmonary signs."

"BCG Vaccination Against Tuberculosis" is truly an excellent reference, with a fine bibliography of past and recent writings on the subjects. For this reader however, it did not clarify the BCG problem.

F. E. M.

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